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Postpartum Health Education Needs: Perceptions Of First-Time Mothers And Health Care Providers

Lisa Elam Rowland

POSTPARTUM HEALTH EDUCATION NEEDS: PERCEPTIONS OF FIRST-TIME MOTHERS AND HEALTH CARE PROVIDERS

by

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Dedication

This work is dedicated
to Anzolette Searcy DeLoach,
my "Granny".

You made me feel special, you believed in me,
and you knew I would be a nurse long before I did.
I miss you.

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This thesis is about a phenomenon known as "support". In the process of carrying out this project I did, indeed, learn about this phenomenon. For the persons who provided support to me, I would like to express my sincere gratitude and acknowledge their contributions.

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Bradley and Eric Rowland, my children. Thank you for helping me stay aware of the truly important things in life.

Abstract

A descriptive study was designed to answer the following research questions: 1) What are the postpartum health education needs perceived by first-time mothers in the hospital setting and in the primary care setting, and 2) What are the postpartum health education needs of new mothers perceived by health care providers in the hospital setting and in the primary care setting. Mercer's Theory of Maternal Role Attainment was used to guide the research.

Forty-nine subjects participated in the study. The samples consisted of first-time mothers in the hospital (n=22), first-time mothers in the primary care setting (n=15), hospital health care providers (n=16) and primary care health care providers (n=11).

Data were collected using the Howard-Sater Questionnaire which addressed postpartum concerns in four categories: mother-infant psychosocial needs, mother's physical care, infant's physical care, and infant's medical care. Data were analyzed using descriptive statistics. Additional findings using Chi-square analysis delineated 19 items for which the mothers' degree of concern had decreased between the two data collection periods.

Infant medical care was the general category of highest

priority to mothers both in the hospital and in primary care. Hospital health care providers gave equally high priority to the categories of mother's physical care and infant's medical care. Health care providers in primary care placed the greatest emphasis on the category of infant's physical care. Lists were compiled to demonstrate specific priorities for postpartum health education identified by each of the research groups. These lists demonstrated certain similarities between mothers and health care providers, but differences were also noted.

Conclusions drawn from this research can be used to guide nurse clinicians in the role of educator and advocate for new mothers. The most effective education programs provide information identified as significant by both the learner and the teacher.

Recommendations for future research include replication of the study using larger sample sizes from more inclusive populations and settings. It is also recommended that postpartum health education needs be explored by qualitative methods to provide affirmation about priority topics for mothers and health care providers.

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Chapter I

The Research Problem

Postnatal education is an important aspect of health care for new mothers. New mothers face a multitude of physical and emotional changes in the first postpartum weeks while attempting to meet the needs of a highly dependent newborn. The traditional approach to education of new mothers often leaves important questions unanswered. A "gap" in health care typically occurs and new mothers find themselves at home without the skills for self care and infant care. A thorough educational program, one which begins in the hospital and continues into the primary care setting, is essential to facilitate a positive transition to the maternal role.

An effective educational program is one that provides information identified as significant by both the learner and the teacher. Currently, programs for new mothers are based primarily on issues identified by the health care providers. Little attention has been given to those needs described by new mothers. This study seeks to describe those postpartum educational needs identified as significant by first-time mothers and health care providers so that a comprehensive educational program can be designed.

Introduction to the Problem

Historically, maternal and child health issues have been a concern to the nursing and medical professions. Though public health agencies are concerned with all persons, pregnant women and infants are two groups which have traditionally received particular attention (Hanlon & Pickett, 1979). The first children's hospital, established in Philadelphia in 1855, evidenced concern for maternal-child health. Since that time, provisions for care of these two groups have increased (Hanlon & Pickett, 1979). Congressional establishment of the National Commission to Prevent Infant Mortality in 1986 indicated that maternal-child health remains an issue of concern today (Arnold, Brecht, Hockett, Amspacher & Grad, 1989).

Education of new mothers has traditionally been a major component of the plan to deal with the problems related to maternal-child health and infant mortality (Arnold, Brecht, Hockett, Amspacher & Grad, 1989). The delivery of this special type of education, however, has been problematic for a variety of reasons. These reasons include societal trends, current health care practices and individual client beliefs. Despite potential barriers, effective education of new parents can still occur.

Up until the 1950's, close proximity to one's extended family was traditional. Young girls often learned about common needs of a newborn and young children by caring for

younger family members (Brown, 1982). This tradition is no longer prevalent in our mobile society, and often a new mother finds herself without any family members to assist her in this new role. A decrease in the average size of the traditional family from several children to two children has also impacted on young women's exposure to infant care (Brown, 1982).

Health care policies and practices have also undergone radical changes in the last decades. During the 1930's it was not uncommon for postpartum hospitalization to last three weeks. Even in the 1970's, hospitalizations of three to five days were common (Davis, Brucker & MacMullen, 1988). Today, due to hospital cost containment, changes in reimbursement policies, and a move toward "family centered maternity care", there has been a decrease in days of hospitalization for new mothers (Harrison, 1990; Norr & Nacion, 1987). Mothers may typically return home with their new infants after as little as 24 to 48 hours, and some alternative birth centers discharge new mothers as early as two hours after birth (Harrison, 1990; Davis, Brucker, & MacMullen, 1988; Norr & Nacion, 1987).

During postpartum hospitalization, nursing priorities have typically focused on maternal physical recovery and facilitation of the maternal-infant bond (McKenzie, Cannaday & Carroll, 1982). Consequently, with the new mother's shortened exposure to hospital health care professionals,

opportunities to provide adequate education are extremely limited (Mercer, 1986; Davis, Brucker, & MacMullen, 1988).

The health care professional's ability to provide appropriate education for new mothers may also be affected by the attitudes and beliefs of the mothers themselves. New mothers often assume that because they are female, "instinctive" knowledge sufficient to help them deal with a new infant will naturally come to them (Gallagher & Kriedler, 1987). They soon realize that motherhood involves more than instinct, but the early postpartum period is a vulnerable time for a new mother. To admit an inability to cope with the tasks of mothering by asking for help from health care personnel may be viewed as personal failure (Clark & Affonso, 1979). In certain cultures where extended families remain prevalent, clients are more likely to listen to the recommendations of their mothers or grandmothers regarding infant care than they are to seek the advice of health care professionals (Gallagher & Kriedler, 1987).

During pregnancy, it is not uncommon for women to experience increased feelings of dependence (Gallagher & Kriedler, 1987). The schedule of prenatal visits during pregnancy fosters a woman's dependence on the health care system. During a normal 40-week pregnancy, a woman will ideally see a health care provider at four-week intervals for the first 32 weeks, then at two-week intervals until the 36th week, then weekly until delivery (Berkow & Fletcher,

1987). Pregnancy marks the time in a young woman's life when she will have increasingly frequent contact with health care providers.

Families are affected in varying ways by the birth of a new child. Even though childbirth is generally regarded as a natural event which increases the bond between family members, past patterns of family interaction and personal activity must change (Melchoir, 1975; Hampson, 1988). The effect of these changes has been identified as a crisis by some, a developmental stage by others, and a transition by yet other professionals (Melchoir, 1975; Gallagher & Kriedler, 1987; Imle, 1990). Regardless of the particular theory applied to the experience, there is agreement that the acute phase of adaptation to parenthood is brief. Successful adaptation can be facilitated by appropriate educational intervention (Littlefield, 1986; Hampson, 1988; Norr & Nacion, 1987).

Families actively seek information and support after the birth of a child. This interest makes the postpartum period an opportune time for teaching (Littlefield, 1986). The period between two- and four-weeks postpartum may be the time of greatest need for education of new parents (Smith, 1986). However, this is the time when a well-recognized "gap" in health care occurs. A new mother and infant are typically not seen by health care providers until two- to six-weeks postpartum (Hampson, 1988; Littlefield, 1986;

Bull, 1981; Jennings & Edmundson, 1980; Sumner & Fritsch, 1977; Brown, O'Meara & Krowley, 1975). This lack of continuity of health care is unfortunate, particularly in relation to the education of new mothers.

New mothers are generally ready for information which will help them attend the responsibilities of their new role. Information presented during the postpartum period is generally more readily assimilated because mothers are motivated by their own needs to know (Austin, 1980; Bliss-Holtz, 1988). Anticipatory guidance can lessen the intensity of an expected change, and health care professionals are aware of this need (Littlefield, 1986; Hall & Weaver, 1974).

Most hospitals offer some type of education for new mothers, either in the form of a formal program of specific information delivery or an individualized program based on specific needs identified by patient queries or observations of health care professionals (Norr & Nacion, 1987; Littlefield, 1986). The new mother, while attempting to recover physically and emotionally from childbirth, may be bombarded with information for which she is not ready or may go home feeling insufficiently prepared to care for her new infant (Smith, 1986; Bull & Lawrence, 1985).

Researchers have documented a change in maternal concerns over the course of the first few weeks of postpartum experience (Bull, 1981; Sumner & Fritsch, 1977;

Bull & Lawrence, 1985). The changes in maternal concerns indicate a need for various programs of educational intervention. Since exposure to health care professionals is limited for new mothers following delivery, anticipatory guidance is an appropriate intervention (Bull & Lawrence, 1985). Such guidance could take the form of an educational program designed according to needs identified by mothers.

Traditionally, teaching priorities have been designated by health care professionals (Gorman & Kennedy, 1980; Schmidt, 1978; Brown, 1982; McKenzie, Cannaday & Carroll, 1982). Less consideration has been given to those needs identified by the new mothers themselves as their concerns change during the postpartum period (Davis, Brucker & MacMullen, 1988; Bull & Lawrence, 1985). With the acute shortage of in-hospital patient education time and the recognized need to provide for the mother's physical recovery as well as initial adaptation to the infant, it is important to maximize the effectiveness of educational plans. Therefore, it is essential that both the designated concerns of the health care professionals and the perceived needs of new mothers be recognized.

Individuals are more likely to hear and utilize information presented to them when they perceive that their particular needs are understood. Learning is motivated by perceived needs for knowledge. In preparation for learning, health care providers can assist clients in recognizing the

need for knowledge when the health care provider is aware of the anticipated changes that will be experienced by the client. This effort can help the client achieve a trusting relationship with the health care professional which, in turn, will foster learning (Rorden, 1987).

Significance to Nursing

Nurse clinicians can play an important role in facilitating adaptation to parenting, and client education is viewed as a necessary element of this process. A thorough understanding of educational needs identified by new mothers can help nurse clinicians to improve effectiveness of patient teaching by focusing on those particular needs. This focus should enable the clinician to begin an effective working relationship with the new mother so that learning and change can occur. Recognition of changes in educational needs of new mothers is important so that clinicians can provide appropriate anticipatory guidance at various stages of the postpartum period.

Theoretical Framework

Mercer's (1986) theory of Maternal Role Attainment was used to guide the study. Mercer views attainment of the maternal role as a developmental process, occurring largely during the first year of an infant's life. Attainment of the maternal role is dependent on extensive interaction

between the mother and infant. Maternal behaviors indicative of successful attainment of the maternal role are identified as attachment to the infant, competence in care-taking tasks of the infant, and expression of gratification in the maternal role.

A plethora of factors affecting attainment of the maternal role have been recognized. Mercer's (1986) work specifically addressed the following maternal factors as variables: age, perception of birth experience, early separation from infant, social stress, social support, individual personality traits, self-concept, child-rearing attitudes, health status, and gratification. Additionally, unique characteristics of the infant, such as health status and temperament, were considered variables that affect maternal role attainment.

In Mercer's (1986) work, the social support factor affecting maternal role attainment was subdivided into emotional support, informational support, physical support, and appraisal support. The current study focused on aspects of the social support variable.

Emotional support is that which makes a person feel loved, trusted and understood. This type of support typically comes from the individual's family and friends (Mercer, 1986).

Provision of useful information that will help a person to help himself is considered to be a source of

informational support. Useful information is often provided by the nurse clinician in order to facilitate adaptation to the parenting role (Mercer, 1986).

Physical support constitutes those acts of direct help rendered to assist with meeting a person's needs. In the case of a new mother, physical support might be demonstrated by cooking for the mother, cleaning the home, or baby-sitting so that the new mother may rest (Mercer, 1986).

Appraisal support is that which allows a person's performance in a role to be evaluated in relation to other's performance in similar roles. For a new mother, an observation by a health care provider regarding the mother's success or difficulty with caring for the infant would be considered appraisal support (Mercer, 1986).

Although each type of social support is believed to be significant in meeting different needs for new mothers, there is no specific evidence regarding the types of support most needed by a mother in her first year of motherhood (Mercer, 1986). This study describes components of informational support which are considered helpful to new mothers so that appraisal support might then be directed to those concerns mothers are known to have at specific times during the postpartum period. Positive appraisal may potentiate positive self-image for the mother in the new role which may result in an easier attainment of the maternal role.

Assumptions

This study was based on the following assumptions.

1. Informational support is required for successful attainment of the maternal role.

2. First-time mothers will perceive needs for informational support and these perceptions can be measured.

3. Health care professionals will perceive needs for informational support of first-time mothers and these perceptions can be measured.

Purpose of the Study

The purpose of this study was to describe postpartum health education needs as perceived by first-time mothers and health care providers in the hospital setting and in the primary care setting.

Chapter II

Review of the Literature

The literature related to health education of new mothers is replete with assumptions from health care providers regarding topics which are considered to be significant. Although it can be assumed that experienced health care personnel are knowledgeable about some experiences a new mother may encounter, considerably little research has been conducted with specific attention to those needs identified by the clients themselves. There were no studies found which compared postpartum learning needs identified by clients with those identified by health care providers.

A lack of research based on needs identified by the client has been recognized by Imle (1990) who addresses concerns of expectant parents in the third trimester of pregnancy. Imle (1990) points out that while the literature on transition to parenthood contains incidental descriptions of some parental concerns, no systematic research has occurred to specifically identify needs as perceived by expectant parents. Two separate studies have been conducted by Imle using a convenience sample of ten third trimester expectant parents in the Southwest and thirteen third

trimester expectant parents in the Northwest toward the purpose of describing needs and concerns of expectant parents. The studies include both qualitative and quantitative components.

While empirical evidence from Imle's (1990) studies support some of the concerns incidentally described in previous literature, new concerns were also identified. The research subjects identified emotional and developmental needs not previously delineated by research. It was noted that prenatal classes and teaching performed in clinics often focused on physical alterations during pregnancy and labor preparation with little attention to aiding the couple through the transition to parenthood in other realms.

Additionally, the parents in Imle's (1990) studies indicated that they hold expectations of caregivers during the prenatal period which "are different and more stringent than those for caregivers in other health care encounters" (p. 31). This new knowledge indicates a need for reassessment of traditional prenatal care and education. Information obtained in the current study of postpartum concerns may yield an obvious need for change in traditional plans of care, as well.

Clients are routinely seen by health care providers on a frequent basis in the third trimester of pregnancy and it would be logistically reasonable to teach infant care during this time. However, research indicates very little interest

on the part of expectant mothers to learn such information during the prenatal period.

A study by Bliss-Holtz (1988) was conducted to determine if there are differences in pregnant women's desire to learn infant care during the antepartal period. Potential subjects in the Bliss-Holtz (1988) study were informed that the purpose of the study was "to determine items of concern or interest to women during pregnancy" (p. 21). Taped interviews using open-ended questions were transcribed and analyzed.

Interviews were conducted with 189 primiparous women recruited from either a private obstetric practice (34%) or an obstetric clinic in a community hospital (66%). Subjects ranged in age from 18 to 35 years and were divided into three groups of 63 subjects according to number of weeks gestation. Early pregnancy was defined as 5 through 15 weeks gestation, middle pregnancy as 16 through 25 weeks gestation, and late pregnancy as 26 through 39 weeks gestation. There were no statistically significant differences in the groups related to age, race, data collection site, educational level, gravidity and child care experience.

The need to learn infant care was an extremely small area of concern for these research subjects. Among the concerns and interests of women in the early and middle pregnancy groups, needs related to learning infant care

comprised only 3.7% and 3.8 % respectively of those issues discussed. Subjects in the late pregnancy group demonstrated a slight increase in the desire to learn infant care, but this interest constituted only 5.1% of all noted concerns. Bliss-Holtz (1988) surmises that since interest for learning infant care is low at all times during pregnancy, the most appropriate time for such intervention is in the postpartum period.

In an experimental study, Petrowski (1981) attempted to determine the optimum time to teach postpartum content to maternity patients. Hypotheses for this study addressed timing and repetition of instruction. Directional hypotheses indicated that primigravidas who were taught special information in the prenatal period would retain more than those taught only in the postnatal period, and that a group which received special prenatal instruction with a repetition of the same material in the postnatal period would demonstrate long-term information retention greater than the other three groups.

The study used a sample of 40 primigravidas selected randomly from two inner-city hospital maternity clinics in the Washington, D.C. area. The subjects were primarily black, single, young women (mean age 19.3 years) with a relatively low educational level. While this sample is not characteristic of the general maternal population, it is characteristic of many inner-city maternal populations.

Subjects were divided into four treatment groups of ten members each with one group serving as a control. The "special" instruction used as the treatment for this study involved cassette recordings and pictures related to 1) Care of the Umbilical Cord and Navel, 2) Burping or Bubbling a Baby, 3) Perineal Care, and 4) Rest, Activity and Exercise. After the experimental instruction was performed, all subjects received a criterion measure of long-term retention in the second postpartum week.

None of the null research hypotheses were rejected when tested directionally by analysis of covariance at a 0.05 level of significance. However, the F value for the postnatal instruction group most closely approached the critical value for significance. This information lends support to the Bliss-Holtz (1988) findings regarding the postnatal period as the most appropriate timing of infant care teaching.

Furthermore, it is possible that the instructional information presented in this study was not of particular interest to the research subjects. The topics included in Petrowski's "special" instruction are typical of those stressed by health care providers during a client's postpartum hospitalization. Perhaps the results of such an experiment would have been more remarkable if the topics taught in the instructional period included information identified as significant by the first-time mothers.

A 1981 study by Bull focused on the change in concerns of first-time mothers after one week at home. The population for this study was a convenience sample of 30 first-time mothers living in an urban area who delivered at one of two teaching hospitals. The subjects completed a researcher-designed questionnaire on the third postpartum day in the hospital, and another copy of the questionnaire after approximately one week at home. The questionnaire addressed concerns related to self, baby, husband, family, and community.

The Wilcoxon signed rank test was used to determine significant differences in frequency and intensity of concerns after one week at home. Concerns related to physical discomfort decreased significantly ($P = 0.001$) and concerns related to emotional self increased significantly ($P = 0.01$) during the first postpartum week. "Moderate to much" concern related to physiological changes persisted after one week at home.

Topics related to the infant were subdivided into infant physical care and infant behavior. There were no statistically significant changes in concern related to infant behavior. This area continued to be a source of moderate to much concern. There was a decrease in concern related to infant physical care ($P = 0.05$) after one week at home. Concerns related to husband, family and community were ranked as "little or no concern" for the mothers in

this study at both of the data collection times.

The results of this study indicate a need for primary health care providers to focus on anticipatory guidance related to infant behavior and maternal physiological changes. Less attention needs to be focused on infant physical care and maternal physical discomforts by the time a new mother returns to the primary care setting.

In a similar study, Bull & Lawrence (1985) investigated the use of knowledge by mothers during the first postpartum weeks. Multiparas and primiparas were included in this study since it was felt that items on the researcher-designed questionnaire were basic to both groups. A convenience sample of 49 multiparas and 29 primiparas (n = 78) was used. The age of the infant at the time the mothers completed the questionnaire ranged from five to 21 days, with a mean of 11.2 days.

On the questionnaire, the research subjects marked those specific teaching topics found to be useful regarding self care and infant care during the first weeks at home. A total of 70% of the mothers reported self care information to be useful. The majority of the subjects found detailed information regarding perineal care to be helpful. Information regarding breast care, elimination, activity and social interaction was also found to be valuable. Infant care information was found to be useful by 94% of the subjects in this project. Specifically, information

regarding bathing, cord care, genital care, shampooing, and spacing of feedings was believed to be of assistance.

The questionnaire for this research also had an open-ended question asking what other information might have been helpful. Thirty comments from mothers identified a need for more information regarding infant care. Twelve of these comments were related to infant behavior, nine were related to infant physical care, and nine more addressed a need for more information related to infant feeding. Fifteen mothers indicated a need for more information related to self care.

The comments by the respondents in this study related to needs for additional informational support demonstrate clearly that needs are not sufficiently being met in the hospital postpartum period. Anticipatory guidance is indicated as an appropriate intervention.

Sumner & Fritsch (1977) conducted an early study of postnatal parental concerns. A descriptive study was conducted as a needs assessment project to justify the creation of an education-support service for parents of newborns. Telephone calls to the health care facility which were initiated by parents of children up to six weeks of age were monitored in an attempt to identify those questions most frequently asked by new parents. A total of 270 calls and 495 questions were analyzed.

Calls were most frequent in the first 1-2 days after returning home from the hospital. Other peaks in the rates

of calls occurred when the infant was 7 and 10 days old, and weekly thereafter (at 14, 21, 28, and 35 days). Concerns related to infant feeding constituted the majority (31%) of the total number of questions asked by the new parents. Gastrointestinal disturbance of the newborn (colic, constipation, spitting up, diarrhea) was the area which prompted the next most frequent number of questions (21%). Concerns related to postpartum issues for the mother comprised only 9% of the questions posed to the health care providers in this study.

The results of this study indicate that parents return home with a need for further knowledge about dealing with their newborn. These findings may be supported by the current research project.

Gruis (1977) conducted another early study to identify postpartum concerns of mothers. A convenience sample of 40 mothers (17 primiparas, 23 multiparas) completed a questionnaire one month after delivery. The ages of the mothers ranged from 18 to 36 years. All subjects were living with the father of the baby at the time of the study, and 30 of the 40 subjects had formal education beyond high school.

Of primary concern to the participants in this study was the return of their figure to "normal". Second in importance was regulating the demands of housework, husband, and children. Infant behavior ranked fifth in importance,

and infant growth and development ranked tenth on the list of concerns for the women in this study. The issue of infant safety was sixteenth in the order of concerns.

The results of this study differ somewhat from those obtained in more recent studies of postnatal concerns where issues related to the infant are found to be most significant. However, it is interesting to note that concerns related to self increased at one month postpartum in the Gruis (1977) study. Primary health care providers should be aware that a mother's need for information related to self-care in the later postpartum period may increase.

A 1985 study by Howard and Sater described self-perceived health education needs of primiparous adolescent mothers. A sample of 66 recently delivered participants ranging in age from 14 to 18 was used for the study. All subjects were enrolled in teen parent programs and were of various ethnic backgrounds (34% Hispanic, 36% white, 30% black). Fifty percent of the participants were between one and eight weeks postpartum at the time of the study, with the other 50% from nine to 33 weeks postpartum.

A researcher-designed questionnaire was used on which the respondents indicated on a Likert-type scale, their beliefs about the importance of items related to four content areas. These areas included infant medical needs, infant daily physical care, mother's physical needs, and psychosocial needs of mothers and infants.

Infant medical needs were perceived by this group to be the most important as compared to the other areas. Within this category, the majority of the subjects (86%) thought that "how to take care of a sick baby" was most important. The need to know how to tell "when the baby is sick" was identified as very important by 83% of the subjects.

In terms of infant physical care, which was the area next most significant to these participants, the issue of protecting the baby from accidents was perceived to be most important (89%). Other aspects of parenthood perceived as significant to this group were "how to make the baby feel happy and loved" (90%) and "how to be a good parent" (84%). The area of mother's physical care was of least importance to this sample overall. The specific topic within this area which was given the most significance was "care of episiotomy or C-section stitches" (76%).

The results of this study indicate that the topics of primary concern to the adolescent maternal population relate to infant instead of maternal needs. The tool designed for the Howard & Sater (1985) study was utilized for the current study with a population not exclusively adolescent in age.

Degenhart-Leskowsky (1989) conducted a study similar to that of Howard & Sater (1985). Using the Howard-Sater questionnaire, Degenhart-Leskowsky compared the perceived needs of adolescent and non-adolescent mothers in the immediate postpartum hospital period.

A convenience sample of 52 primiparous mothers was obtained for the study. Twenty-two subjects were 18 years of age or younger (mean age = 16.9 years) and 30 mothers were between the ages of 19 and 35 years (mean age = 25.3 years). The majority of the adolescent mothers were single (91%) and the majority of the non-adolescent mothers were married (87%). The adolescent participants lived primarily with their parents (73%) while the non-adolescent mothers lived primarily with the infant's father (87%). Fifty percent of the adolescent population had attended prenatal classes while 87% of the non-adolescent group had attended such classes. Evidently, the two study populations were diverse.

In order to determine if the adolescent mothers had different health education needs than the non-adolescent mothers, a one-tailed t-test was performed. The adolescent mothers were found to have significantly greater needs for information regarding infant medical care ($p < 0.025$), but no significant differences were found between the groups regarding infant physical care or psychosocial needs of mothers and infants. Generally, the adolescent group was found to have higher informational needs scores as compared to the non-adolescent group. An unexpected finding in this study was that the non-adolescent mothers perceived a greater need for health education related to maternal physical care than did the adolescent population.

The findings of this study are consistent with those of the Howard & Sater (1985) study. Both of the groups in the Degenhart-Leskowsky (1989) study identified needs for information related to infant medical care as the most important area of concern. These findings exist despite the fact that the mothers in the two studies varied in age, geographic location, educational background, race, living arrangement, and duration of postpartum experience. Based on this observation, the mothers involved in the current study were not subdivided according to race, age, living arrangement or educational level.

A descriptive study by Davis, Brucker and MacMullen (1988) investigated the teaching priorities of mothers in the first three days of the postpartum period. The study was conducted at a large midwestern university hospital. All English-speaking mothers with uncomplicated deliveries and healthy newborns were considered eligible research subjects. Over a four-month period on randomly selected days, eligible mothers were identified and approached for inclusion in the study. A total sample consisted of 117 mothers ranging in age from 15 to 36 years. Teenagers made up 20% of the study population; 61% were in their 20's; 19% were in their 30's.

A questionnaire designed for this study included 44 items related to potential maternal learning needs about self or infant. Items were rated on a four point Likert-

type scale from "very important" to "not very important". Items considered to be teaching priorities were those rated "very important" by at least 50% of the subjects.

Data were analyzed primarily by percentages for the three age groups initially, and then again according to parity of the subjects. Regardless of age or parity, certain findings were consistent. The maternal care topic rated as most important to the majority of all mothers was "postpartum complications", with "stitches/episiotomy" rated second in importance. The infant care topic rated as most important by all the mothers was "infant illnesses". The importance of "feeding baby" was second for all groups except the 30-year-olds, for whom "well-baby care" was identified as the second most important topic. The results of this study demonstrate further that certain maternal concerns and educational needs have similarities regardless of maternal demographic variables.

Implications of Review of Literature

The research presented in this review evidences professional concern for effective educational intervention for new mothers. Although the prenatal period would be a convenient time to teach infant care, research indicates that expectant mothers have little interest in such information. There is empirical evidence that new mothers tend to leave postpartum hospitalization with unmet needs

for education regarding care of the newborn. Informational needs regarding self-care also exist and often remain unmet.

Health care professionals generally recognize the brevity of postpartum hospitalization as a deterrent to thorough postpartum education. Likewise, primary care visits tend to be typically short in duration. It is apparent that health care providers need to use these periods of interaction with clients to meet the most significant needs possible.

In order to do this, educational priorities of postpartum clients must be identified and those health education topics stressed by health care providers at different times in postpartum care must be consistent with those needs. Toward these ends, the current study describes maternal and health care professionals' perceptions of postpartum educational needs in the hospital setting and in the primary care setting.

Chapter III

The Method

The purpose of this study was to describe postpartum health education needs as perceived by first-time mothers and health care providers in hospital settings and primary care settings. The descriptive method of research was used to elicit information from first-time mothers and health care providers.

Design of the Study

A descriptive design was utilized for this study. Descriptive studies have as their main objective, "the accurate portrayal of the characteristics of persons, situations, or groups" (Polit & Hungler, 1987, p. 528). This study was designed to describe those needs for postpartum health education perceived by first time mothers and health care providers in hospital settings and primary care settings.

Variables The dependent variable of interest was postpartum health education of new mothers as perceived by first-time mothers, hospital health care providers, and primary care health care providers. These needs were

measured by the Howard-Sater Questionnaire (1985). The independent variables for the study were first-time mothers and health care providers. An intervening variable may have been the accuracy with which the subjects responded to the questionnaire.

Definition of Terms For the purpose of this study, the following terms were defined:

Perceived Postpartum Health Education Needs Those needs identified by first-time mothers and licensed professional health care providers as operationalized by the Howard-Sater Questionnaire.

First-Time Mother Any woman who carried a pregnancy to at least 37 weeks and who delivered a healthy first child, as determined by medical records, during the data collection period at the local hospital.

Hospital Setting The episode of hospitalization, typically between one and five days long, following the birth of a child.

Hospital Health Care Providers Any professionally licensed nurse (R.N. or L.P.N.) who is employed by the local hospital to care for mothers or infants. These nurses may be employed on the postpartum unit or in the newborn nursery or may be functioning in a role as nurse educator for the new mother population.

Primary Health Care Providers Any professionally

licensed person (M.D., R.N., or L.P.N.) who is employed in a clinic where participating mothers and/or their infants are cared for as patients. Nurses in these clinics may be functioning in the expanded role as Nurse Practitioners.

Primary Care Setting Any clinic in which a participating primary health care provider is employed.

Research Questions The following research questions were addressed by this study:

1. What are the postpartum health education needs perceived by first-time mothers in the hospital setting and in the primary care setting?

2. What are the postpartum health education needs of new mothers perceived by health care providers in the hospital setting and in the primary care setting?

Setting, Population, and Sample

The setting for this study was a small rural community in northeast Mississippi which has a population of approximately 15,000 (United States Statistical Abstract, 1988). Within the city limits lies a major state university with a student population of approximately 12,000 (Mississippi Statistical Abstract, 1988). A 96-bed county hospital provides health care services to residents of the local county and five surrounding counties. Although some of the surrounding counties contain facilities which offer

health care for new mothers, individuals from the surrounding counties often elect to deliver at the county hospital described (M. Fulcher, personal communication, January 11, 1991). During the year from June 1990 to May 1991 an average of 104 births per month occurred at the hospital (T. Finch, personal communication, June 12, 1991).

The population of first-time mothers for this study included all mothers who experienced a first viable birth in the specified county hospital during the data collection period. Inclusion criteria for participants in the study were (a) a minimum of 15 years of age, (b) voluntary participation, and (c) ability to read and comprehend the Howard-Sater Questionnaire.

The sample of convenience of first-time mothers in hospital settings consisted of 22 subjects. Ages of the mothers ranged from 15 to 36 years (mean = 21.09 years, median = 20.5 years). All mothers were primiparas, had uncomplicated pregnancies and deliveries, and delivered healthy newborns. Gestational age of the newborns at birth ranged from 37 to 42 weeks. Twelve of the participants were black (54.5%) and 10 were white (45.5%). Four of the 22 mothers (18%) had attended prenatal classes. Eleven mothers were married (50%) and eleven were unmarried (50%). All mothers who were approached and who met inclusion criteria agreed to participate in the study. Fifteen of the original 22 mothers (68%) who responded with a completed follow-up

questionnaire comprised the sample of first-time mothers in primary care settings.

The population of health care providers included all licensed professional health care personnel who provide services for mothers or children either in the hospital or in primary care settings. The convenience sample of hospital health care providers consisted of 16 postpartum and nursery nurses. Registered nurses accounted for 75% of the sample (n=12) and licensed practical nurses accounted for 25% (n=4) of the sample. The sample of convenience of primary health care providers consisted of 11 nurses and physicians from local private physicians offices. This sample was constituted of two physicians (18%), six registered nurses (55%), and three licensed practical nurses (27%). One of the registered nurses in the this sample functioned in an expanded role as a family nurse clinician.

Instrumentation

Data were collected using the Howard-Sater Questionnaire (see Appendix A). The questionnaire is a self-administered tool composed of two sections which contain a total of 54 items pertaining to the needs of mothers and infants. Responses were rated on a four-part Likert scale ranging from "very important" to "not important". The instrument concluded with an open-ended question seeking responses regarding additional information

which could be helpful for new mothers.

The instrument was developed by Howard and Sater (1985) to assess educational needs of adolescent mothers related to infant physical needs, infant medical needs, mother-infant psychosocial needs, and mother's physical needs. The tool has been used in slightly modified forms in research studies throughout the United States and Canada. The authors stated that results have been consistent in these studies, although no data exist pertaining to reliability and validity of the tool (J. S. Howard, personal communication, November 26, 1990; J Sater, personal communication, January 5, 1991). For the purpose of the current study, permission was sought and granted for a modification of the tool which involved deletion of demographic data.

Answers to the 54 items on the instrument were assigned values ranging from one to four. A value of "1" was assigned when a respondent indicated that the topic was "not very important". Such value assignment progressed so that a value of "4" was assigned to those topics considered to be "most important". Therefore, any item with a consistent value of "4" indicated the perception of a significant health education need.

Data Collection Procedure

Following approval by the Committee on Use of Human Subjects in Experimentation at Mississippi University for

Women (see Appendix B), the local county hospital was contacted for consent to solicit participation in the study from first-time mothers and hospital health care providers. Permission was granted by the hospital's Director of Nursing (see Appendix C). Permission was also given for the researcher to view the hospital's log book of births which provided information about potential maternal research subjects based on parity status and outcome of the birth event. Demographic data on the mothers was obtained from hospital medical records.

Mothers on the postpartum unit who met inclusion criteria were contacted on the first or second postpartum day. The purpose of this visit was to explain the nature of the study and obtain voluntary informed consent. Confidentiality of all information was assured. Informed consent documents were signed in the presence of the researcher (see Appendix D), and the questionnaire was given to the mothers. Subjects were instructed to complete the tool based on perceived needs for health education at the current time. After approximately 30 minutes, the researcher returned to collect the completed questionnaires, which had been placed in sealed envelopes by the mothers.

Data collection from hospital health care professionals was conducted in a similar manner. While on duty, licensed nurses who provided care for mothers or infants were approached by the researcher. The purpose of the study was

explained, documentation of informed consent was obtained (see Appendix E), and questionnaires were delivered. These subjects were instructed to complete the tool based on their perceptions of health education needs of mothers during postpartum hospitalization. The completed questionnaires were returned to the researcher in sealed envelopes.

Agency representatives in two primary care facilities were then contacted for consent to solicit participation from health care providers employed in the clinics. After permission was granted (see Appendix F), the researcher approached potential research subjects to explain the nature of the study and obtain documentation of informed consent. The subjects were instructed to complete the tool based on their perceptions of mothers' needs for health education in the primary care setting. Completed questionnaires were placed in sealed envelopes and returned to the researcher.

Data collection for perceptions of the mothers' health education needs in primary care settings occurred after the infant was 3 to 4 weeks of age. At this time a letter was mailed to the mothers with an attached copy of the tool. Fifteen mothers of the original sample of 22 returned the completed tool to the researcher in self-addressed stamped envelopes. Data were collected in May and June, 1991.

Limitations

The limitations for the current study were as follows:

1. The non-random sample for the study was small in size and was limited to first-time mothers and health care providers in a rural Mississippi area. This type of sampling prevents generalization to all first-time mothers and health care providers.

2. Although the Howard-Sater Questionnaire had been used in at least two previously published studies, no data were available which established reliability and validity for the tool.

3. An additional limitation was the lack of uniformity in data collection settings for the first-time mothers completing the second questionnaire.

Data Analysis

According to Polit & Hungler (1987), "A set of data can be completely summarized in terms of three characteristics: the shape of the distribution of scores, central tendency, and variability" (p. 371). Data were analyzed according to recommendations set forth in the previous reference. Frequency distributions were created to yield percentages. Means were formulated to measure central tendency and standard deviations were calculated as measures of variability. These analyses provided information regarding postpartum health education needs perceived as most significant by the respondents in the study.

Chapter IV

The Findings

The purpose of this study was to describe postpartum health education needs perceived as significant by first-time mothers and health care providers in hospital and primary care settings. A descriptive research design was utilized. Responses to questionnaire items were analyzed using descriptive statistics including frequencies, means and standard deviations. This chapter presents results of the study and data analysis. Additional findings also are included.

Results of Data Analysis

Forty-nine subjects participated in this study. All participants indicated their perceptions about the importance of 54 items on the Howard-Sater Questionnaire using a Likert scale which ranged from "not important" (1) to "very important" (4). Items on the questionnaire addressed four general categories of concern: mother's physical care, mother-infant psychosocial needs, infant's physical care, and infant's medical care. Items specific to these four categories were combined so that an overall indication of health education priorities could be

determined. Mean values of the perceptions of research groups are presented in Table 1.

Table 1

Importance of Four Categories of Information Reported by First-Time Mothers and Health Care Providers

	Mothers in Hospital (N=22)	Health Care Providers in Hospital (N=16)	Mothers in Primary Care (N=15)	Health Care Providers in Primary Care (N=11)
Mother-infant psychosocial needs	3.31	3.05	2.77	3.03
Mother's physical care	3.43	3.36	2.92	3.03
Infant's physical care	3.55	3.31	3.15	3.65
Infant's medical care	3.59	3.36	3.31	3.49

Means of responses from a Likert scale where 1=Not Important, 2=Somewhat Important, 3=Important, 4= Very Important.

The topic of infant medical care held the highest priority for mothers both in the hospital and in primary care settings. Primary care health care providers placed the greatest emphasis on items related to infant physical care with infant medical care as the second most important category. Hospital health care providers gave equal priority to mother's physical care and infant's medical care.

Mothers in the Hospital Setting

Information presented in this category was elicited from mothers in the hospital on the second or third postpartum day. At this point in motherhood, the sample tended to perceive that most of the questionnaire items were either "important" or "very important". This tendency is evidenced by the mean responses for this group presented in Table 1.

To enhance description of health education needs perceived by mothers in the hospital setting, frequency analyses were used to generate percentages of responses for each item. Table 2 illustrates perceptions of the sample about mother-infant psychosocial needs. Although this category held the least priority for the sample, three items are of note. More than 80% of the research subjects indicated that it was "very important" to have information about 1) how to be a good parent, 2) ways to make a baby feel happy and loved, and 3) community agencies and resources.

The category related to mother's physical care was second least important to the research sample at the time of postpartum hospitalization. Table 3 demonstrates percentages of the subjects' responses in this category. The majority of items were indicated to be "important" or "very important", and five items were considered to be very important by more than 60% of the sample. These items were

1) birth control, 2) how soon another pregnancy can occur, 3) what happens to a woman's body during delivery, 4) care of stitches (episiotomy or C-section), and 5) how soon to restart sexual intercourse.

Items related to infant physical care held the second highest priority for mothers during postpartum hospitalization. Table 4 gives an analysis of responses in this category. The issues of most importance within this category were 1) care of the baby's cord, navel and circumcision, 2) bathing the baby, 3) what to do when the baby cries, and 4) how to feed the baby. More than 80% of the respondents indicated that these topics were "very important".

The category of items related to infant's medical care was of highest significance to the mothers in the hospital. The number of items on the Howard-Sater Questionnaire pertaining to this category is smaller than the number of items in other categories. However, more than 80% of the respondents indicated a perception that five of these items were "very important". These items were: 1) colic, 2) how to take a baby's temperature, 3) medical care for a baby, 4) how to know when a baby is sick, and 5) how to take care of a sick baby. Table 5 presents this data.

TABLE 2

Importance of Information Concerning Mother-Infant Psychosocial Needs as Perceived by Mothers in Hospital (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves/their baby?	Not Important	Somewhat Important	Important	Very Important
Emotional reaction to being a new parent.	0.0	4.5	50.0	45.5
Depressed feeling, "post-partum blues", or "baby blues".	4.5	4.5	36.4	54.5
What it's really like to be parent.	0.0	27.3	27.3	45.5
Problems other mothers have.	13.6	36.4	27.3	22.7
How life with the baby's father is affected by the baby's birth.	0.0	27.3	22.7	50.0
How life with other people is affected by the baby's birth (parents, in-laws, friends).	4.5	18.2	45.5	31.8
How to get the baby's birth certificate.	0.0	13.6	18.2	68.2
How to be a good parent.	0.0	0.0	13.6	86.4
How to best manage time with a new baby.	0.0	9.1	50.0	40.9
Ways to make a baby feel happy and loved.	0.0	0.0	13.6	86.4
Spoiling the baby.	9.1	40.9	36.4	13.6
What to expect that a baby can do in the first few weeks of life.	0.0	0.0	50.0	50.0
Community agencies and resources (public health agencies, food programs).	0.0	0.0	18.2	81.8
How to choose a baby-sitter.	13.6	9.1	31.8	45.5

N= 22

TABLE 3

Importance of Information Concerning Mother's Physical Care as Perceived by Mothers in Hospital (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves?	Not Important	Somewhat Important	Important	Very Important
What happens to a woman's body during delivery?	0.0	4.5	22.7	72.7
Type, amount and duration of discharge (flow) after delivery.	0.0	4.5	36.4	59.1
When to expect a period to return.	0.0	0.0	54.5	45.5
Care of breasts.	0.0	4.5	40.9	54.5
Care of stitches (episiotomy or C-section).	0.0	4.5	27.3	68.2
Stretch marks.	4.5	22.7	54.5	18.2
Constipation.	0.0	18.2	63.6	18.2
Medical check-ups after delivery.	4.5	4.5	18.2	72.7
How soon to re-start sexual intercourse.	0.0	13.6	22.7	63.6
Birth control.	0.0	9.1	13.6	77.3
How soon another pregnancy can occur.	0.0	0.0	22.7	77.3
Exercises to help "get back into shape".	0.0	9.1	50.0	40.9
Proper eating for a new mother.	4.5	18.2	36.4	40.9
Sleep and rest needs for a new mother.	4.5	13.6	22.7	59.1

N=22

TABLE 4

Importance of Information Concerning Infant's Physical Care as Perceived by Mothers in Hospital (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
How the newborn baby looks.	4.5	18.2	40.9	36.4
How to feed the baby.	0.0	0.0	18.2	81.8
Information about bottle/breast feeding.	0.0	0.0	22.7	77.3
Preparing bottles.	0.0	13.6	27.3	59.1
How often to feed the baby.	0.0	4.5	27.3	68.2
Burping the baby.	0.0	18.2	18.2	63.6
How to hold the baby.	0.0	9.1	36.4	54.5
Equipment needed for a young baby (crib, bottles, clothes).	0.0	18.2	50.0	31.8
Bathing the baby.	0.0	4.5	9.1	86.4
Care of the baby's cord, navel, and circumcision.	0.0	4.5	0.0	95.5
Sleeping habits of young babies.	0.0	0.0	50.0	50.0
Diaper care.	0.0	4.5	27.3	68.2
How to diaper a baby.	0.0	9.1	45.5	45.5
What to do when the baby cries.	4.5	0.0	13.6	81.8
Clipping the baby's nails.	0.0	4.5	77.3	18.2
Baby's laundry (diapers, sheets, clothes).	0.0	27.3	31.8	40.9

N=22

TABLE 5

Importance of Information Concerning Infant's Medical Care as Perceived by Mothers in Hospital (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
Colic (baby's stomach aches).	4.5	4.5	9.1	81.8
Cradle cap.	0.0	13.6	63.6	22.7
Constipation and diarrhea.	0.0	4.5	27.3	68.2
Diaper rashes.	0.0	4.5	27.3	68.2
How to take a baby's temperature.	0.0	0.0	18.2	81.8
When to start immunizations (baby shots).	0.0	9.1	22.7	68.2
How to know when a baby is sick.	0.0	0.0	9.1	90.9
Medical care for a baby.	0.0	0.0	18.2	81.8
How to take care of a sick baby.	0.0	0.0	4.5	95.5
Protecting the baby from accidents.	0.0	4.5	18.2	77.3

N=22

Mothers in the Primary Care Setting

The sample of mothers in the primary care setting consisted of 15 of the original 22 mothers at a time when their new infant was between three and four weeks of age. By this time in their parenting experience, the degree of importance assigned to all categories decreased when compared to their responses at the time of postpartum hospitalization (see Table 1).

Table 6 presents percentages of responses to items in the category of mother-infant psychosocial needs by mothers receiving primary care. This category remained the least significant for these subjects as compared to the other three categories. Items which were indicated to be either "important" or "very important" by at least 80% of the subjects were 1) ways to make a baby feel happy and loved, 2) how to be a good parent, 3) how to get the baby's birth certificate, and 4) emotional reaction to being a new parent.

Consistent with their responses during hospitalization, these research subjects ranked the category of mother's physical care next in importance. The four items most frequently perceived to be "very important" at this time were 1) birth control, 2) care of stitches (episiotomy or C-section), 3) what happens to a woman's body during delivery, and 4) type, amount and duration of discharge (flow) after delivery. Table 7 illustrates these findings.

Infant's physical care was perceived to be second in importance only to infant's medical care. Several items regarding the infant's physical care continued to be perceived as "very important" by a majority of the mothers (see Table 8). These items were 1) what to do when the baby cries, 2 how to feed the baby, 3) how often to feed the baby, and 4) care of the baby's cord, navel and circumcision. The relative importance of many items in this category decreased greatly between the first and second times the subjects completed the questionnaire. However, the importance of "what to do when the baby cries" decreased only from 81.8% to 80.0%, and the significance of "how often to feed the baby" decreased only from 68.2% to 60.0%

The items related to infant's medical care remained the highest priority for mothers in primary care. Percentage data are presented in Table 9 for this topic. Two issues, "how to know when a baby is sick" and "how to take care of a sick baby", were considered to be "very important" by 100% of the subjects. Two other areas of primary concern were 1) how to take a baby's temperature and 2) protecting the baby from accidents.

TABLE 6

Importance of Information Concerning Mother-Infant Psychosocial Needs as Perceived by Mothers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves/their baby?	Not Important	Somewhat Important	Important	Very Important
Emotional reaction to being a new parent.	0.0	20.0	60.0	20.0
Depressed feeling, "post-partum blues", or "baby blues".	0.0	53.3	20.0	26.7
What it's really like to be parent.	0.0	46.7	26.7	26.7
Problems other mothers have.	26.7	40.0	20.0	13.3
How life with the baby's father is affected by the baby's birth.	13.3	26.7	40.0	20.0
How life with other people is affected by the baby's birth (parents, in-laws, friends).	13.3	73.3	13.3	0.0
How to get the baby's birth certificate.	0.0	6.7	66.7	26.7
How to be a good parent.	0.0	6.7	46.7	46.7
How to best manage time with a new baby.	0.0	46.7	26.7	26.7
Ways to make a baby feel happy and loved.	0.0	0.0	60.0	40.0
Spoiling the baby.	13.3	40.0	40.0	6.7
What to expect that a baby can do in the first few weeks of life.	13.3	33.3	40.0	13.3
Community agencies and resources (public health agencies, food programs).	6.7	33.3	46.7	13.3
How to choose a baby-sitter.	6.7	26.7	26.7	40.0

N=15

TABLE 7

Importance of Information Concerning Mother's Physical Care as Perceived by Mothers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves?	Not Important	Somewhat Important	Important	Very Important
What happens to a woman's body during delivery?	0.0	13.3	33.3	53.3
Type, amount and duration of discharge (flow) after delivery.	0.0	20.0	26.7	53.3
When to expect a period to return.	0.0	13.3	73.3	13.3
Care of breasts.	0.0	33.3	60.0	6.7
Care of stitches (episiotomy or C-section).	0.0	13.3	33.3	53.3
Stretch marks.	26.7	66.7	6.7	0.0
Constipation.	6.7	20.0	46.7	26.7
Medical check-ups after delivery.	0.0	6.7	53.3	40.0
How soon to re-start sexual intercourse.	6.7	60.0	13.3	20.0
Birth control.	6.7	20.0	13.3	60.0
How soon another pregnancy can occur.	13.3	13.3	40.0	33.3
Exercises to help "get back into shape".	33.3	33.3	33.3	0.0
Proper eating for a new mother.	0.0	13.3	66.7	20.0
Sleep and rest needs for a new mother.	0.0	6.7	60.0	33.3

N=15

TABLE 8

Importance of Information Concerning Infant's Physical Care as Perceived by Mothers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
How the newborn baby looks.	0.0	33.3	53.3	13.3
How to feed the baby.	0.0	0.0	40.0	60.0
Information about bottle/breast feeding.	0.0	0.0	66.7	33.3
Preparing bottles.	13.3	6.7	26.7	53.3
How often to feed the baby.	0.0	6.7	33.3	60.0
Burping the baby.	0.0	13.3	60.0	26.7
How to hold the baby.	0.0	33.3	33.3	33.3
Equipment needed for a young baby (crib, bottles, clothes).	6.7	33.3	20.0	40.0
Bathing the baby.	0.0	6.7	60.0	33.3
Care of the baby's cord, navel, and circumcision.	0.0	6.7	33.3	60.0
Sleeping habits of young babies.	0.0	26.7	66.7	6.7
Diaper care.	6.7	46.7	33.3	13.3
How to diaper a baby.	6.7	20.0	66.7	6.7
What to do when the baby cries.	0.0	0.0	20.0	80.0
Clipping the baby's nails.	0.0	46.7	46.7	6.7
Baby's laundry (diapers, sheets, clothes).	13.3	53.3	26.7	6.7

N=15

TABLE 9

Importance of Information Concerning Infant's Medical Care as Perceived by Mothers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
Colic (baby's stomach aches).	0.0	0.0	66.7	33.3
Cradle cap.	0.0	26.7	53.3	20.0
Constipation and diarrhea.	0.0	0.0	53.3	46.7
Diaper rashes.	0.0	33.3	46.7	20.0
How to take a baby's temperature.	0.0	0.0	33.3	66.7
When to start immunizations (baby shots).	0.0	0.0	46.7	53.3
How to know when a baby is sick.	0.0	0.0	0.0	100.0
Medical care for a baby.	0.0	6.7	46.7	46.7
How to take care of a sick baby.	0.0	0.0	0.0	100.0
Protecting the baby from accidents.	0.0	0.0	33.3	66.7

N=15

Health Care Providers in the Hospital Setting

The research subjects which comprised the sample of hospital health care providers perceived health education needs related to mother's physical care and infant's medical care to be of equal importance. Infant's physical care was only slightly less important, and the topic of mother-infant psychosocial needs was perceived to be the least significant of the four topics (see Table 1).

In the category of mother-infant psychosocial needs, the item pertaining to "ways to make a baby feel happy and loved" was noted to be "very important" to 81.2% of the respondents. Other items which held the greatest degree of importance for at least 50% of the subjects were 1) emotional reaction to being a new parent, 2) how to be a good parent, and 3) community agencies and resources. Percentages of responses to items are presented in Table 10.

Hospital health care providers discerned several items to be of the highest importance in the category of mother's physical care. Four items were determined to be most important by 75% of the subjects. These items were 1) what happens to a woman's body during delivery, 2) care of stitches (episiotomy or C-section), 3) how soon to re-start sexual intercourse, and 4) birth control. Table 11 contains the item analysis for this group of respondents.

Table 12 contains data regarding the perceptions of hospital health care providers about the topic of infant's

physical care. Of the items in this group, the data indicated that three specific topics were "very important" to more than 65% of the respondents. These items were 1) information about breast/bottle feeding, 2) how to feed the baby, and 3) care of the baby's cord, navel, and circumcision.

Table 13 presents data regarding the determinations of this group of subjects about the importance of information concerning infant's medical care. Most of the responses were rated "important" or "very important". The three items which received the highest ratings for importance are 1) how to know when a baby is sick, 2) how to take care of a sick baby, and 3) protecting the baby from accidents.

TABLE 10

Importance of Information Concerning Mother-Infant Psychosocial Needs as Perceived by Hospital Health Care Providers (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves/their baby?	Not Important	Somewhat Important	Important	Very Important
Emotional reaction to being a new parent.	0.0	6.2	37.5	56.2
Depressed feeling, "post-partum blues", or "baby blues".	0.0	6.2	56.2	37.5
What it's really like to be parent.	6.2	18.8	37.5	37.5
Problems other mothers have.	25.0	18.8	50.0	6.2
How life with the baby's father is affected by the baby's birth.	0.0	12.5	56.2	31.3
How life with other people is affected by the baby's birth (parents, in-laws, friends).	6.2	56.2	31.3	6.2
How to get the baby's birth certificate.	6.2	18.8	43.7	31.3
How to be a good parent.	6.2	12.5	31.3	50.0
How to best manage time with a new baby.	6.2	12.5	50.0	31.3
Ways to make a baby feel happy and loved.	0.0	12.5	6.2	81.2
Spoiling the baby.	6.2	37.5	37.5	18.8
What to expect that a baby can do in the first few weeks of life.	0.0	25.0	56.2	18.8
Community agencies and resources (public health agencies, food programs).	0.0	25.0	25.0	50.0
How to choose a baby-sitter.	6.2	12.5	43.7	37.5

N=16

TABLE 11

Importance of Information Concerning Mother's Physical Care as Perceived by Hospital Health Care Providers (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves?	Not Important	Somewhat Important	Important	Very Important
What happens to a woman's body during delivery?	6.2	12.5	6.2	75.0
Type, amount and duration of discharge (flow) after delivery.	0.0	6.2	37.5	56.2
When to expect a period to return.	0.0	12.5	43.7	43.7
Care of breasts.	0.0	0.0	37.5	62.5
Care of stitches (episiotomy or C-section).	0.0	0.0	25.0	75.0
Stretch marks.	6.2	68.7	18.8	6.2
Constipation.	0.0	18.8	62.5	18.8
Medical check-ups after delivery.	0.0	0.0	31.3	68.7
How soon to re-start sexual intercourse.	0.0	0.0	25.0	75.0
Birth control.	0.0	0.0	25.0	75.0
How soon another pregnancy can occur.	0.0	12.5	31.3	56.2
Exercises to help "get back into shape".	0.0	37.5	56.2	6.2
Proper eating for a new mother.	0.0	6.2	50.0	43.7
Sleep and rest needs for a new mother.	0.0	0.0	56.2	43.7

N=16

TABLE 12

Importance of Information Concerning Infant's Physical Care as Perceived by Hospital Health Care Providers (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
How the newborn baby looks.	0.0	25.0	56.2	18.8
How to feed the baby.	0.0	0.0	25.0	75.0
Information about bottle/breast feeding.	0.0	0.0	12.5	87.5
Preparing bottles.	0.0	12.5	25.0	62.5
How often to feed the baby.	0.0	12.5	31.3	56.2
Burping the baby.	0.0	0.0	43.7	56.2
How to hold the baby.	0.0	6.2	43.7	50.0
Equipment needed for a young baby (crib, bottles, clothes).	0.0	18.8	56.2	25.0
Bathing the baby.	0.0	12.5	56.2	31.3
Care of the baby's cord, navel, and circumcision.	0.0	6.2	25.0	68.7
Sleeping habits of young babies.	6.2	37.5	25.0	31.3
Diaper care.	0.0	18.8	56.2	25.0
How to diaper a baby.	0.0	18.8	62.5	18.8
What to do when the baby cries.	0.0	12.5	62.5	25.0
Clipping the baby's nails.	0.0	31.3	37.5	31.3
Baby's laundry (diapers, sheets, clothes).	6.2	25.0	50.0	18.8

N=16

TABLE 13

Importance of Information Concerning Infant's Medical Care as Perceived by Hospital Health Care Providers (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
Colic (baby's stomach aches).	0.0	12.5	43.7	43.7
Cradle cap.	0.0	37.5	43.7	18.8
Constipation and diarrhea.	0.0	6.2	37.5	56.2
Diaper rashes.	6.2	12.5	37.5	43.7
How to take a baby's temperature.	0.0	6.2	37.5	56.2
When to start immunizations (baby shots).	0.0	0.0	25.0	75.0
How to know when a baby is sick.	0.0	12.5	6.2	81.2
Medical care for a baby.	0.0	18.8	12.5	68.7
How to take care of a sick baby.	0.0	12.5	12.5	75.0
Protecting the baby from accidents.	0.0	6.2	18.8	75.0

N=16

Health Care Providers in the Primary Care Setting

The data for the research sample of primary health care providers indicated, generally, a high degree of importance placed with infant's medical and physical care. The categories of mother-infant psychosocial needs and mother's physical care were perceived to be less significant (see Table 1).

Even with this evidence, the data demonstrated that the issue of "ways to make a baby feel happy and loved" was considered "very important" to 81.8% of the respondents. Table 14 presents information regarding the perceptions of this sample about mother-infant psychosocial needs. Also significant to more than 60% of these subjects were the topics of "what to expect that a baby can do in the first few weeks of life" and "how to choose a baby-sitter".

Table 15 illustrates percentages of responses by primary care health care providers to items regarding mother's physical care. Five items which were indicated to be "very important" to more than 50% of the subjects were 1) how soon another pregnancy can occur, 2) birth control, 3) how soon to re-start sexual intercourse, 4) when to expect a period to return, and 5) care of stitches (episiotomy or C-section).

The category of information related to infant's physical care was considered to be the most significant for health care providers in primary care settings. Five items

were perceived to be "very important" by more than 80% of the respondents, and one item, "how to feed the baby", was perceived to be "very important" by 100% of the subjects. The other items of high priority were 1) information about breast/bottle feeding, 2) how often to feed the baby, 3) burping the baby, and 4) how to hold the baby. Table 16 contains percentages of responses for this group of data.

The information related to infant's medical care was also perceived to be highly significant by primary care health care providers. In particular, "how to know when a baby is sick" was indicated to be "very important" by 100% of the subjects. Other items considered to be of great significance were 1) protecting the baby from accidents, 2) how to take care of a sick baby, 3) how to take a baby's temperature, and 4) colic (baby's stomach aches). The item analyses for this group of subjects is contained in Table 17.

TABLE 14

Importance of Information Concerning Mother-Infant Psychosocial Needs as Perceived by Health Care Providers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves/their baby?	Not Important	Somewhat Important	Important	Very Important
Emotional reaction to being a new parent.	0.0	9.1	36.4	54.5
Depressed feeling, "post-partum blues", or "baby blues".	0.0	27.3	36.4	36.4
What it's really like to be parent.	0.0	36.4	27.3	36.4
Problems other mothers have.	9.1	45.5	27.3	18.2
How life with the baby's father is affected by the baby's birth.	18.2	18.2	9.1	54.5
How life with other people is affected by the baby's birth (parents, in-laws, friends).	36.4	0.0	45.5	18.2
How to get the baby's birth certificate.	9.1	36.4	18.2	36.4
How to be a good parent.	0.0	18.2	54.5	27.3
How to best manage time with a new baby.	0.0	45.5	36.4	18.2
Ways to make a baby feel happy and loved.	0.0	0.0	18.2	81.8
Spoiling the baby.	18.2	27.3	18.2	36.4
What to expect that a baby can do in the first few weeks of life.	0.0	27.3	9.1	63.6
Community agencies and resources (public health agencies, food programs).	0.0	36.4	9.1	54.5
How to choose a baby-sitter.	9.1	27.3	0.0	63.6

N=11

TABLE 15

Importance of Information Concerning Mother's Physical Care as Perceived by Health Care Providers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about themselves?	Not Important	Somewhat Important	Important	Very Important
What happens to a woman's body during delivery?	27.3	18.2	18.2	36.4
Type, amount and duration of discharge (flow) after delivery.	9.1	18.2	36.4	36.4
When to expect a period to return.	9.1	18.2	36.4	36.4
Care of breasts.	0.0	18.2	27.3	54.5
Care of stitches (episiotomy or C-section).	9.1	18.2	18.2	54.5
Stretch marks.	18.2	36.4	45.5	0.0
Constipation.	0.0	36.4	54.5	9.1
Medical check-ups after delivery.	0.0	27.3	27.3	45.5
How soon to re-start sexual intercourse.	9.1	18.2	18.2	54.5
Birth control.	0.0	18.2	18.2	63.6
How soon another pregnancy can occur.	0.0	18.2	18.2	63.6
Exercises to help "get back into shape".	18.2	18.2	45.5	18.2
Proper eating for a new mother.	0.0	9.1	54.5	36.4
Sleep and rest needs for a new mother.	0.0	18.2	54.5	27.3

N=11

TABLE 16

Importance of Information Concerning Infant's Physical Care as Perceived by Health Care Providers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
How the newborn baby looks.	0.0	0.0	45.5	54.5
How to feed the baby.	0.0	0.0	0.0	100.0
Information about bottle/breast feeding.	0.0	0.0	9.1	90.9
Preparing bottles.	0.0	0.0	27.3	72.7
How often to feed the baby.	0.0	0.0	9.1	90.9
Burping the baby.	0.0	0.0	9.1	90.9
How to hold the baby.	0.0	0.0	18.2	81.8
Equipment needed for a young baby (crib, bottles, clothes).	0.0	9.1	63.6	27.3
Bathing the baby.	0.0	0.0	54.5	45.5
Care of the baby's cord, navel, and circumcision.	0.0	0.0	45.5	54.5
Sleeping habits of young babies.	0.0	9.1	18.2	72.7
Diaper care.	0.0	18.2	18.2	63.6
How to diaper a baby.	0.0	9.1	45.5	45.5
What to do when the baby cries.	0.0	0.0	27.3	72.7
Clipping the baby's nails.	0.0	9.1	72.7	18.2
Baby's laundry (diapers, sheets, clothes).	0.0	36.4	45.5	18.2

N=11

TABLE 17

Importance of Information Concerning Infant's Medical Care as Perceived by Health Care Providers in Primary Care (Percent of Responses)

Question: How important is it for new mothers to have the following information about their baby?	Not Important	Somewhat Important	Important	Very Important
Colic (baby's stomach aches).	0.0	18.2	9.1	72.7
Cradle cap.	0.0	18.2	54.5	27.3
Constipation and diarrhea.	0.0	18.2	18.2	63.6
Diaper rashes.	0.0	18.2	27.3	54.5
How to take a baby's temperature.	0.0	0.0	27.3	72.7
When to start immunizations (baby shots).	0.0	0.0	36.4	63.6
How to know when a baby is sick.	0.0	0.0	0.0	100.0
Medical care for a baby.	0.0	9.1	27.3	63.6
How to take care of a sick baby.	0.0	9.1	9.1	81.8
Protecting the baby from accidents.	0.0	0.0	9.1	90.9

N=11

Means and Variance of Perceptions

An item analysis of mean responses and standard deviations within the four categories addressed by the Howard-Sater Questionnaire revealed information related to the consistency of perceptions between the groups.

Mother-Infant Psychosocial Needs

The data from the sample of mothers in the hospital demonstrated a noticeably small measure of variance for those items perceived to be highly significant in the category of mother-infant psychosocial needs (Table 18). The three items with the smallest standard deviations were also the items with the highest mean. These items were 1) how to be a good parent, 2) ways to make a baby feel happy and loved, and 3) community agencies and resources.

The data for hospital health care providers had standard deviations which were generally larger than those for the mothers in the hospital. However, three items for the health care providers which had high means and relatively small variance were 1) ways to make a baby feel happy and loved, 2) emotional reaction to being a new parent, and 3) depressed feelings, "post-partum blues", or "baby blues".

For the sample of mothers in primary care settings, the issue of "ways to make a baby feel happy and loved" continued to be significant, as did "how to be good parent". Additionally, this sample consistently perceived the need

for information regarding "how to get the baby's birth certificate".

Primary care health care providers demonstrated the least measure of variance concerning the topic of "ways to make a baby feel happy and loved". Another area of little variance and high significance for this group was "emotional reaction to being a new parent".

Mother's Physical Care

One particular item within the category related to mother's physical care received consistently low priority for all research groups (Table 19). The item concerning "stretch marks" had the lowest mean for all respondents as compared to other items in this category.

The mothers in the hospital were relatively consistent when determining that the following topics were of high priority: 1) how soon another pregnancy can occur, 2) what happens to a woman's body during delivery, 3) type, amount and duration of discharge after delivery, and 4) care of stitches.

Four areas were of note within the category of mother's physical care for health care providers in the hospital. The least measure of variance and the highest priority were assigned to the following items: 1) care of stitches, 2) how soon to re-start sexual intercourse, 3) birth control, and 4) medical check-ups after delivery.

Data revealed that mothers in the primary care setting

demonstrated a greater degree of variance in their perceptions than they did in the hospital setting. At the time they were receiving primary care, the mothers were primarily concerned with the following items: 1) what happens to a woman's body after delivery, 2) care of stitches, 3) medical check-ups after delivery, and 4) type, amount and duration of discharge after delivery. Two issues which were also determined to be significant and which had the least variance for this group were "proper eating for a new mother" and "sleep and rest needs for a new mother".

Responses from primary care health care providers also had a relatively large degree of variance within this category. Items noted to be of highest significance with the least measure of variance were 1) birth control, 2) how soon another pregnancy can occur, and 3) care of breasts. Data showed that the issues of "proper eating for a new mother" and "sleep and rest needs for a new mother" were also perceived to be important and a smaller standard deviation occurred for these items.

Infant's Physical Care

Table 20 contains information related to the category of infant's physical care. Mothers in both the hospital and primary care settings and health care providers in the hospital perceived that the item related to "how the newborn baby looks" was relatively low in importance (means= 3.09, 2.80, and 2.93 respectively). Health care providers in

primary care settings, however, perceived this item to have a greater degree of importance (mean 3.54).

Data concerning perceptions of mothers in the hospital revealed a lack of variance in perceptions of important items. Many items had high means and low standard deviations. These items were 1) care of the baby's cord, navel and circumcision, 2) bathing the baby, 3) how to feed the baby, 4) information about breast/bottle feeding, 5) how often to feed the baby, 6) diaper care, and 7) what to do when the baby cries.

Health care providers in the hospital setting also demonstrated a small variance in perceptions of most important information. Items of note were 1) information about breast/bottle feeding, 2) how to feed the baby, 3) burping the baby, and 4) care of the baby's cord, navel, and circumcision.

Mothers in primary care again demonstrated a small measure of variance in their perceptions about importance of information concerning infant's physical care. The item pertaining to "what to do when the baby cries" had the highest mean for this group. Other issues of importance were 1) care of the baby's cord, navel, and circumcision, 2) how to feed the baby, 3) how often to feed the baby, 4) information about breast/bottle feeding, and 5) bathing the baby.

Data regarding health care providers in primary care

demonstrated a high degree of consistency in perceptions regarding important topics. Issues of note were 1) how to feed the baby, 2) information about breast/bottle feeding, 3) how often to feed the baby, 4) burping the baby, and 5) how to hold the baby.

Infant's Medical Care

Means and standard deviations for the research groups regarding infant's medical care are presented in Table 21. As discussed earlier in this chapter, this topic of concern was perceived to be the most important by the majority of the research groups.

Data related to the mothers in the hospital indicated that a slight variance existed in their perceptions of the most important topics. These topics were 1) how to take care of a sick baby, 2) how to know when a baby is sick, 3) medical care for a baby, and 4) how to take a baby's temperature.

The standard deviations of the data for hospital health care providers were somewhat larger than those for the mothers. The topics with the highest means were 1) when to start immunizations, 2) protecting the baby from accidents, 3) how to know when the baby is sick, and 4) how to take care of a sick baby.

The data in this category for mothers and health care providers in primary care revealed similar perceptions between the groups. All of these research subjects

indicated a high degree of importance related to "how to know when a baby is sick" and "how to take care of a sick baby" (variance = 0.00). Other issues consistently significant for these two groups were 1) protecting the baby from accidents and 2) how to take the baby's temperature.

TABLE 18

Importance of Information Concerning Mother-Infant Psychosocial Needs Reported by First-Time Mothers and Health Care Providers

Question: How important is it for new mothers to have the following information about themselves/their baby?	Mothers in Hospital (N=22)	Health Care Providers in Hospital (N=16)	Mothers in Primary Care (N=15)	Health Care Providers in Primary Care (N=11)
Emotional reaction to being a new parent.	3.34 (0.57)	3.50 (0.61)	3.00 (0.63)	3.45 (0.65)
Depressed feelings, "post-partum blues", or "baby blues".	3.40 (0.77)	3.31 (0.58)	2.73 (0.85)	3.09 (0.79)
What it's really like to be a parent.	3.18 (0.83)	3.06 (0.89)	2.80 (0.83)	3.00 (0.85)
Problems other mothers have.	2.59 (0.98)	2.37 (0.92)	2.20 (0.97)	2.54 (0.89)
How life with the baby's father is affected by the baby's birth.	3.22 (0.84)	3.18 (0.63)	2.66 (0.94)	3.00 (1.20)
How life with other people is affected by the baby's birth (parents, in-laws, friends).	3.04 (0.82)	2.37 (0.69)	2.00 (0.51)	2.45 (1.15)
How to get the baby's birth certificate.	3.54 (0.72)	3.00 (0.69)	3.20 (0.54)	2.81 (1.02)
How to be a good parent.	3.86 (0.34)	3.25 (0.90)	3.40 (0.61)	3.09 (0.66)
How to best manage time with a new baby.	3.31 (0.63)	3.06 (0.82)	2.80 (0.83)	2.72 (0.74)
Ways to make a baby feel happy and loved.	3.86 (0.34)	3.68 (0.68)	3.40 (0.48)	3.81 (0.38)
Spoiling the baby.	2.54 (0.83)	2.68 (0.84)	2.40 (0.80)	2.72 (1.13)
What to expect that a baby can do in the first few weeks of life.	3.50 (0.50)	2.93 (0.65)	2.53 (0.88)	3.36 (0.88)
Community agencies and resources (public health clinics, food programs)	3.81 (0.38)	3.25 (0.82)	2.66 (0.78)	3.18 (0.93)
How to choose a baby-sitter.	3.09 (1.04)	3.12 (0.85)	3.00 (0.96)	3.18 (1.11)

Means of responses from a Likert scale where 1=Not Important, 2=Somewhat Important, 3=Important, 4=Very Important.
Standard deviation indicated in parentheses.

TABLE 19

Importance of Information Concerning Mother's Physical Care Reported by First-Time Mothers and Health Care Providers

Question: How important is it for new mothers to have the following information about themselves?	Mothers in Hospital (N=22)	Health Care Providers in Hospital (N=16)	Mothers in Primary Care (N=15)	Health Care Providers in Primary Care (N=11)
What happens to a woman's body during delivery.	3.68 (0.55)	3.50 (0.93)	3.40 (0.71)	2.63 (1.22)
Type, amount and duration of discharge (flow) after delivery.	3.54 (0.58)	3.50 (0.61)	3.33 (0.78)	3.00 (0.95)
When to expect a period to return.	3.45 (0.49)	3.31 (0.68)	3.00 (0.51)	3.00 (0.95)
Care of breasts.	3.50 (0.58)	3.62 (0.48)	2.73 (0.57)	3.36 (0.77)
Care of stitches (episiotomy or C-section).	3.63 (0.56)	3.75 (0.43)	3.40 (0.71)	3.18 (1.02)
Stretch marks.	2.86 (0.75)	2.25 (0.66)	1.80 (0.54)	2.27 (0.74)
Constipation.	3.00 (0.60)	3.00 (0.61)	2.93 (0.85)	2.72 (0.61)
Medical check-ups after delivery.	3.59 (0.77)	3.68 (0.46)	3.33 (0.59)	3.18 (0.83)
How soon to re-start sexual intercourse.	3.50 (0.72)	3.75 (0.43)	2.46 (0.88)	3.18 (1.02)
Birth control.	3.68 (0.63)	3.75 (0.43)	3.26 (0.99)	3.45 (0.78)
How soon another pregnancy can occur.	3.77 (0.41)	3.43 (0.70)	2.93 (0.99)	3.45 (0.78)
Exercises to help "get back into shape".	3.31 (0.63)	2.68 (0.58)	2.00 (0.81)	2.63 (0.97)
Proper eating for a new mother.	3.13 (0.86)	3.37 (0.59)	3.06 (0.57)	3.27 (0.61)
Sleep and rest needs for a new mother.	3.36 (0.88)	3.43 (0.49)	3.26 (0.57)	3.09 (0.66)

Means of responses from a Likert scale where 1=Not Important, 2=Somewhat Important, 3=Important, 4=Very Important.
Standard deviation indicated in parentheses.

TABLE 20

Importance of Information Concerning Infant's Physical Care Reported by First-Time Mothers and Health Care Providers

Question: How important is it for new mothers to have the following information about their baby?	Mothers in Hospital (N=22)	Health Care Providers in Hospital (N=16)	Mothers in Primary Care (N=15)	Health Care Providers in Primary Care (N=11)
How the newborn baby looks.	3.09 (0.84)	2.93 (0.65)	2.80 (0.65)	3.54 (0.49)
How to feed the baby.	3.81 (0.38)	3.75 (0.43)	3.60 (0.48)	4.00 (0.00)
Information about bottle/breast feeding.	3.77 (0.41)	3.87 (0.33)	3.33 (0.47)	3.90 (0.28)
Preparing bottles.	3.45 (0.72)	3.50 (0.70)	3.20 (1.04)	3.72 (0.44)
How often to feed the baby.	3.63 (0.56)	3.43 (0.70)	3.53 (0.61)	3.90 (0.28)
Burping the baby.	3.45 (0.78)	3.56 (0.49)	3.13 (0.61)	3.90 (0.28)
How to hold the baby.	3.45 (0.65)	3.43 (0.60)	3.00 (0.81)	3.81 (0.38)
Equipment needed for a young baby (crib, bottles, clothes).	3.13 (0.69)	3.06 (0.65)	2.93 (0.99)	3.18 (0.57)
Bathing the baby.	3.81 (0.48)	3.18 (0.63)	3.26 (0.57)	3.45 (0.49)
Care of the baby's cord, navel, and circumcision.	3.90 (0.41)	3.62 (0.59)	3.53 (0.61)	3.54 (0.49)
Sleeping habits of young babies.	3.50 (0.50)	2.81 (0.94)	2.80 (0.54)	3.63 (0.64)
Diaper care.	3.63 (0.56)	3.06 (0.65)	2.53 (0.80)	3.45 (0.78)
How to diaper a baby.	3.36 (0.64)	3.00 (0.61)	2.73 (0.67)	3.36 (0.64)
What to do when the baby cries.	3.72 (0.68)	3.12 (0.59)	3.80 (0.40)	3.72 (0.44)
Clipping the baby's nails.	3.13 (0.45)	3.00 (0.79)	2.60 (0.61)	3.09 (0.51)
Baby's laundry (diapers, sheets, clothes).	3.13 (0.81)	2.81 (0.80)	2.26 (0.77)	2.81 (0.71)

Means of responses from a Likert scale where 1=Not Important, 2=Somewhat Important, 3=Important, 4=Very Important.
Standard deviations indicated in parentheses.

TABLE 21

Importance of Information Concerning Infant's Medical Care Reported by First-Time Mothers and Health Care Providers

Question: How important is it for new mothers to have the following information about their baby?	Mothers in Hospital (N=22)	Health Care Providers in Hospital (N=16)	Mothers in Primary Care (N=15)	Health Care Providers in Primary Care (N=11)
Colic (baby's stomach aches).	3.68 (0.76)	3.31 (0.68)	3.33 (0.47)	3.54 (0.78)
Cradle cap.	3.09 (0.59)	2.81 (0.72)	2.93 (0.67)	3.09 (0.66)
Constipation and diarrhea.	3.63 (0.56)	3.50 (0.61)	3.46 (0.49)	3.45 (0.78)
Diaper rashes.	3.63 (0.56)	3.18 (0.88)	2.86 (0.71)	3.36 (0.77)
How to take a baby's temperature.	3.81 (0.38)	3.50 (0.61)	3.66 (0.47)	3.72 (0.44)
When to start immunizations (baby shots).	3.59 (0.65)	3.75 (0.43)	3.53 (0.49)	3.63 (0.48)
How to know when the baby is sick.	3.90 (0.28)	3.68 (0.68)	4.00 (0.00)	4.00 (0.00)
Medical care for a baby.	3.81 (0.38)	3.50 (0.79)	3.40 (0.61)	3.54 (0.65)
How to take care of a sick baby.	3.95 (0.20)	3.62 (0.69)	4.00 (0.00)	4.00 (0.00)
Protecting the baby from accidents.	3.72 (0.53)	3.68 (0.58)	3.66 (0.47)	3.90 (0.28)

Means of responses from a Likert scale where 1=Not Important, 2=Somewhat Important, 3=Important, 4=Very Important.
Standard deviations indicated in parentheses.

Open-ended Question

A question at the end of the Howard-Sater questionnaire asked, "What other information do you feel would be helpful?". At the time of postpartum hospitalization only one mother responded. Her recommendation was "teach new parents how to care for the baby". Two mothers in the primary care setting responded. Their suggestions dealt with care after circumcision for boys and vaginal bleeding in infant girls.

Health care providers in the hospital answered the open-ended question with recommendations for the following information: 1) what to expect from siblings, 2) the importance of rest for a new mother in the hospital, 3) how soon a new mother should return to the work force, 4) how to deal with teething, 5) general growth and development in the first year, 6) providing parents with a 24-hour telephone number which will be answered by a nurse at the hospital who can help with problems, and 7) CPR training for all new parents.

Two health care providers in the primary care setting answered the open-ended question with recommendations to include information regarding "spitting-up", hormonal changes in infants causing breast engorgement and vaginal bleeding, engorgement in the mother's breasts, and how to deal with mastitis.

Additional Findings

The data generated by this study allowed for a comparison between the perceptions of first-time mothers at two distinct times during the experience of motherhood. The sample for this comparison consisted of the 15 mothers who completed the Howard-Sater Questionnaire on separate occasions. The first set of data was obtained when the infants were one, two, or three days old; the second set was obtained when the infants were between three and four weeks of age.

A Chi-square analysis was performed for each item in the survey. Statistically significant changes were found for 19 of the 54 items on the questionnaire ($P < 0.05$). All of the changes which were statistically significant showed a decrease in importance for the mothers. Although information about many of these items continued to be perceived as important at the time of the second data collection, a change in the degree of concern is denoted by the Chi-square test.

Within the category related to mother-infant psychosocial needs, changes in perceptions about the following items were statistically significant: 1) depressed feelings, "post-partum blues", or "baby blues", 2) how life with other people is affected by the baby's birth (parents, in-laws, friends), 3) how to get the baby's birth certificate, 4) ways to make the baby feel happy and loved,

5) what to expect that a baby can do in the first few weeks of life, and 6) community agencies and resources (public health clinics, food programs).

Four items from the category of mother's physical care decreased significantly in importance to the mothers. These items were 1) when to expect a period to return, 2) care of breasts, 3) stretch marks, and 4) exercises to help "get back into shape".

There were seven items related to infant's physical care which decreased in perceived importance for the sample. They were 1) information about bottle/breast feeding, 2) burping the baby, 3) bathing the baby, 4) care of the baby's cord, navel, and circumcision, 5) sleeping habits of young babies, 6) diaper care, and 7) clipping the baby's nails.

Only two items from the category of infant's medical care had statistically significant changes. These items were 1) colic (baby's stomach aches), and 2) diaper rash.

Summary

From the data analyzed for this study it was possible to compose lists of priority postpartum health education needs for first-time mothers and health care providers in the research sample. Several items in the lists hold similar priorities for mothers and health care providers. Some differences are noted as well. These lists are found in Tables 22, 23, 24, and 25.

Table 22

List of Postpartum Health Education Priorities Perceived by Mothers in the Hospital Setting

1. How to know when the baby is sick.
2. How to take care of a sick baby.
3. How to be a good parent.
4. Ways to make a baby feel happy and loved.
5. Care of the baby's cord, navel, and circumcision.
6. Feeding the baby.
7. Bathing the baby.
8. How to take a baby's temperature.
9. Medical care for a new baby.
10. What to do when the baby cries.
11. Community agencies and resources.
12. Care of stitches (episiotomy or C-section).
13. Changes in a woman's body during delivery.
14. How soon another pregnancy can occur.
15. Birth control.
16. Colic in the infant.
17. Infant constipation and diarrhea.
18. Infant diaper rashes.
19. Maternal medical check-ups after delivery.
20. Type, amount and duration of discharge after delivery.
21. How to get the baby's birth certificate.

Table 23

List of Postpartum Health Education Priorities Perceived by Mothers in the Primary Care Setting

1. How to know when the baby is sick.
2. How to take care of a sick baby.
3. What to do when the baby cries.
4. How to take a baby's temperature.
5. Protecting the baby from accidents.
6. Feeding the baby.
7. Starting immunizations.
8. Care of the baby's cord, navel, and circumcision.
9. Ways to make a baby feel happy and loved.
10. How to be a good parent.
11. Care of stitches (episiotomy or C-section).
12. Changes in a woman's body during delivery.
13. Infant constipation and diarrhea.
14. Medical care for a baby.
15. Infant colic.
16. Type, amount and duration of discharge after delivery.
17. Maternal medical check-ups after delivery.
18. Bathing the baby.
19. Birth control.
20. How to get the baby's birth certificate.
21. Emotional reaction to being a new parent.

Table 24

List of Postpartum Health Education Priorities Perceived by Health Care Providers in the Hospital Setting

1. Feeding the baby.
2. Care of stitches (episiotomy or C-section).
3. How soon to re-start sexual intercourse.
4. Birth control.
5. Ways to make the baby feel happy and loved.
6. When to start baby's immunizations.
7. Protecting the baby from accidents.
8. How to know when the baby is sick.
9. How to take care of a sick baby.
10. Maternal medical check-ups after delivery.
11. Care of breasts.
12. Care of the baby's cord, navel, and circumcision.
13. Burping the baby.
14. Emotional reaction to being a new parent.
15. Changes in a woman's body during delivery.
16. Type, amount and duration of discharge after delivery.
17. How to take a baby's temperature.
18. Infant constipation and diarrhea.
19. Medical care for a baby.
20. Sleep and rest needs for a new mother.
21. How soon another pregnancy can occur.

Table 25

List of Postpartum Health Education Priorities Perceived by Health Care Providers in Primary Care Settings

1. Feeding the baby.
2. How to know when the baby is sick.
3. How to take care of a sick baby.
4. Protecting the baby from accidents.
5. Burping the baby.
6. How to hold the baby.
7. Ways to make a baby feel happy and loved.
8. How to take a baby's temperature.
9. What to do when the baby cries.
10. Preparing bottles.
11. When to start immunizations.
12. Sleeping habits of young babies.
13. Infant colic.
14. Medical care for a baby.
15. How the newborn baby looks.
16. Care of the baby's cord, navel, and circumcision.
17. Emotional reaction to being a new parent.
18. Birth control.
19. How soon another pregnancy can occur.
20. Infant constipation and diarrhea.
21. Bathing the baby.

Chapter V

The Outcomes

The purpose of this research was to describe postpartum health education needs as perceived by first-time mothers and health care providers in hospital settings and primary care settings. A descriptive design was used to answer the following research questions: 1) what are the postpartum health education needs perceived by first-time mothers in the hospital setting and in the primary care setting, and 2) what are the postpartum health education needs for first-time mothers perceived by health care providers in hospital settings and in primary care settings.

The sample of mothers in the hospital setting consisted of 22 primiparas. Fifteen of these mothers comprised the sample of mothers in primary care settings. The sample for hospital health care providers consisted of 16 licensed nurses who provided care for new mothers or infants in a local hospital. Eleven professionals from local clinics constituted the sample of primary care health care providers. Data were collected using the Howard-Sater Questionnaire which addressed four categories of health education needs: 1) mother-infant psychosocial needs, 2) mother's physical care, 3) infant's physical care, and 4)

infant's medical care.

Summary of Findings

Descriptive statistics including frequency distributions, means and standard deviations were used to analyze the data. Responses of the research sample to an open-ended question were also reported. Additional findings revealed changes in the degree of importance 15 mothers attributed to 19 items on the questionnaire. Many of the items for which changes were statistically significant (P = 0.05) remained important to the mothers at the time of second data collection from this sample.

Lists were compiled to demonstrate the perceptions of priority postpartum health education topics for the groups in the study. In examining the results of the study, it was determined that many similarities exist between perceptions of mothers and health care providers, however, some differences were noted between the groups in regard to the priority assigned to different topics.

The topics of infant medical care and infant physical care were the most important to the mothers in both the hospital and in primary care settings. Health care providers in the hospital were greatly concerned with teaching new mothers about maternal physical care and infant medical care. Health care providers in primary care settings prioritized teaching new mothers about the infant's

physical care and infant medical care.

Information about feeding the baby was among the high priority topics perceived by all groups. Information about "stretch marks", "problems other mothers have", and "spoiling the baby" were of relatively low significance to all the respondents in the study.

Discussion

The findings from this study indicate a prevalence of maternal concern about meeting infant medical needs. These findings are consistent with results of the studies by Howard & Sater, (1985) and Degenhart-Leskowsky (1989). The Howard & Sater study used a sample of adolescents who ranged from one to 33 weeks postpartum. The Degenhart-Leskowsky study used samples of adolescent and nonadolescent mothers in a hospital setting. The current study used mothers in hospital and primary care settings who ranged in age from 15 to 36 years. Even though the samples differed between the three studies, priorities of health education needs perceived by the mothers were consistent.

The results of the current study also support findings from the Bull (1981) study which explored changes in maternal concerns after one week at home. The results of the Bull study indicated a persistence of concern related to maternal physical discomfort. Also noted was a decrease in concern related to infant physical care. The mothers in the

current study indicated similar changes in perceived needs.

By the time new mothers reach the primary care setting, they have often been providing daily care for the baby for two weeks or more with little or no intervention from of health care providers (Hampson, 1988; Littlefield, 1986; Bull, 1981; Jennings & Edmundson, 1980). It may be assumed that after some time at home, mothers feel fairly secure about their ability to meet the infant's daily physical needs. Perhaps a way to further explore this issue would be a qualitative study whereby the mother would be afforded the opportunity to discuss priority health education needs with the researcher.

In the current study, the sample of health care providers in primary care settings indicated that infant physical care was the topic of most importance. Among the priority issues for these health care providers were providing information regarding "how to hold the baby" and "burping the baby". The mothers in primary care settings demonstrated a decrease from their initial concern about infant's physical care while remaining most interested in learning about the infant's medical care. Apparently, these mothers held some degree of comfort in their abilities to meet the physical needs of their infants.

The issues related to maternal physical needs were not considered to be highly important to the primary care health care providers. However, like the respondents in the Bull

(1981) study, the mothers in the present study indicated a persistent need for information about these topics. Even at three to four weeks postpartum concerns existed related to care of stitches, maternal physical changes, and vaginal discharge after delivery.

Findings from the Sumner & Fritsch (1977) study which reported the content of questions asked of health care providers in the first postpartum weeks are also supported by the current study. Issues related to infant feeding and gastrointestinal disturbances were important to the mothers in both studies during the first weeks of motherhood. Data from the mothers in the present study demonstrated an increase in priority for this type of information after three to four weeks at home as compared to the priority placed with these topics in the hospital.

As compared to the priority assigned to other categories, the degree of concern evidenced by the mothers in the present study related to maternal physical needs is inconsistent with the findings in the Gruis (1977) study. The sample in the Gruis study indicated that a primary concern after one month at home was return of their figure to "normal". The respondents in the current study ranked the issue of getting "back into shape" low in priority as compared to most other issues.

Overall, the mothers in the current study perceived a very high degree of need for information pertaining to the

categories addressed by the Howard-Sater Questionnaire. Often, the respondents indicated their belief that most issues were either "important" or "very important". This fact evidences the need for effective informational support as described in the Mercer (1986) Theory of Maternal Role Attainment.

In the Mercer theory, social support is recognized as one factor which affects maternal role attainment. Social support consists of emotional support, informational support, physical support, and appraisal support. Emotional support makes a person feel loved, trusted and understood. Informational support is that which helps a person to help himself. Physical support constitutes acts of direct help to assist with meeting a person's needs, and appraisal support allows a person's performance in a role to be evaluated in relation to others' performance in a similar role.

Implications for Nursing

The role of health educator is a significant component of the nurse clinician's practice. Information gained from the present study can be used to aid the development of therapeutic relationships between nurse clinicians and new mothers so that attainment of the maternal role can be facilitated.

Learning is motivated by perceived needs for knowledge

(Rorden, 1987). This fact makes the postpartum period a most opportune time for nurse clinicians to establish themselves as valuable, reliable, knowledgeable information sources for new mothers. Additionally, it is recognized that individuals learn more readily when they perceive that their particular needs are being addressed.

With knowledge of the typical priority health education needs perceived by new mothers, the nurse clinician can provide informational support which first addresses the needs foremost in the client's mind. This effort can lead to a greater degree of trust from the new mother as she feels that her needs are understood. This feeling of trust and understanding can have the added effect of emotional support for the new mother.

Evidence indicates that by the time a new mother reaches primary care, her concerns related to physical care of the infant have decreased since hospitalization. The nurse clinician who cares for mothers in primary care can offer appraisal support in terms of the physical care the mother provides for the infant. Then as necessary, the health care provider can lead the new mother to recognition of the need for other knowledge perceived as important by the health care provider. Nurse clinicians can effectively facilitate attainment of the maternal role by providing appropriate informational, physical, emotional, and appraisal support so that the new mother perceives that her

health education needs will be met.

Recommendations for Further Study

A similar study, conducted with larger samples over a longer period of time is recommended by the researcher. Also, previous studies have indicated postpartum health education needs in multiparas which are similar at times to those of primiparas. Replication of this study using varied populations is recommended. Further exploration of perceived postpartum health education needs could be conducted by qualitative methods to provide affirmation about priority topics for new mothers and health care providers.

References

Arnold, L. S., Brecht, M. C., Hockett, A. B., Amspacher, K. A., & Grad, R. K. (1989). Lessons from the past. Maternal-Child Nursing Journal, 14, 75-82.

Austin, S. E. J. (1980). Family centered discharge planning classes. Maternal-Child Nursing Journal, 5, 96-97.

Berkow, R., & Fletcher, A. J., (Eds.). (1987). The Merck manual of diagnosis and therapy (15th ed.). Rahway, NJ: Merck, Sharp & Dohme Research Laboratories.

Bliss-Holtz, V. J. (1988). Primiparas' prenatal concern for learning infant care. Nursing Research, 37, 20-24.

Brown, B. (1982). Maternity patient teaching - a nursing priority. JOGN Nursing, 11, 11-13.

Brown, M. S., O'Meara, C., & Krowley, S. (1975). The maternal-child nurse practitioner. American Journal of Nursing, 75, 1298-1299.

Bull, M. J. (1981). Change in concerns of first-time mothers after one week at home. JOGN Nursing, 10, 391-394.

Bull M., & Lawrence, D. (1985). Mothers' use of knowledge during the first postpartum weeks. JOGN Nursing, 14, 315-320.

Clark, A. L., & Affonso, D. D. (1979). Childbearing: A nursing perspective (2nd ed.). Philadelphia: F. A. Davis.

Davis, J. H., Brucker, M. C., & MacMullen, N. J. (1988). A study of mothers' postpartum teaching priorities. Maternal-Child Nursing Journal, 17, 41-50.

Degenhart-Leskowsky, S. M. (1989). Health education needs of adolescent and nonadolescent mothers. JOGN Nursing, 18, 238-244.

Gallagher, L. P., & Kriedler, M. C. (1987). Nursing and health - maximizing human potential throughout the life cycle. Norwalk, CT: Appleton & Lange.

Gorman, C., & Kennedy, C. E. (1980). The parent-educator nurse. Maternal-Child Nursing Journal, 5, 277-279.

Gruis, M. (1977). Beyond maternity: Postpartum concerns of mothers. In L. N. Sherwen & C. Toussie-Weingarten (Eds), Analysis and application of nursing research. Monterey, CA: Wadsworth Health Sciences Division.

Hall, J. E., & Weaver, B. R. (Eds.). (1974). Nursing of families in crisis. Philadelphia: J. B. Lippincott.

Hampson, S. J. (1989). Nursing interventions for the first three postpartum months. JOGN Nursing, 17, 116-122.

Hanlon, J. J., & Pickett, G. E. (1979). Public health administration and practice (7th ed.). St. Louis: C. V. Mosby.

Harrison, L. L. (1990). Patient education in early postpartum discharge programs. Maternal-Child Nursing Journal, 15, 39.

Howard, J. S., & Sater, J. (1985). Adolescent mothers self-perceived health education needs. JOGN Nursing, 14, 399-404.

Imle, M. A. (1990). Third trimester concerns of expectant parents in transition to parenthood. Holistic Nursing Practice, 4(3), 25-36.

Jennings, B., & Edmundson, M. (1980). The postpartum period: After confinement: The fourth trimester. Clinical Obstetrics and Gynecology, 23, 1093-1102.

Littlefield, V. M. (1986). Health education for women - a guide for nurses and other health professionals. Norwalk, CT: Appleton-Century-Crofts.

McKenzie, C. A., Cannaday, M. E., & Carroll, E. (1982). Comprehensive care during the postpartum period. Nursing Clinics of North America, 17(1), 23-47.

Melchoir, L. (1975). Is the postpartum period a time of crisis for some mothers?. Canadian Nurse, 17(7), 30-32.

Mercer, R. T. (1986). First-time motherhood - experiences from teens to forties. New York: Springer.

Norr, K. F., & Nacion, K. (1987). Outcomes of postpartum early discharge, 1960-1986, a comparative review. Birth, 14, 135-140.

Petrowski, D. D. (1981). Effectiveness of prenatal and postnatal instruction in postpartum care. JOGN Nursing, 10, 386-389.

Polit, D. F., & Hungler, B. (1987). Nursing research - principles and methods (3rd ed.). Philadelphia: J. B. Lippincott.

Rorden, J. W. (1987). Nurses as health teachers - a practical guide. Philadelphia: W. B. Saunders.

Schmidt, J. (1978). Using a teaching guide for better postpartum and infant care. JOGN Nursing, 7(3), 23-25.

Smith, L. F. (1986). New-parent teaching in the ambulatory care setting. Maternal-Child Nursing Journal, 11, 256-258.

Sumner, G., & Fritsch, J. (1977). Postnatal parental concerns: The first six weeks of life. JOGN Nursing, 6(3), 27-32.

Appendices

Appendix A

The Howard-Sater Questionnaire

Howard-Sater Questionnaire

How important is it for new mothers to have the following information about themselves?

Please indicate your feelings below.

	Very Important	Important	Somewhat Important	Not Important
1. What happens to a woman's body during delivery.	_____	_____	_____	_____
2. Type, amount and duration of discharge (flow) after delivery.	_____	_____	_____	_____
3. When to expect a period to return.	_____	_____	_____	_____
4. Care of breasts.	_____	_____	_____	_____
5. Care of stitches (episiotomy or C-section).	_____	_____	_____	_____
6. Stretch marks.	_____	_____	_____	_____
7. Constipation.	_____	_____	_____	_____
8. Medical check-ups after delivery.	_____	_____	_____	_____
9. How soon to re-start sexual intercourse.	_____	_____	_____	_____
10. Birth control.	_____	_____	_____	_____
11. How soon another pregnancy can occur.	_____	_____	_____	_____
12. Exercises to help "get back into shape".	_____	_____	_____	_____
13. Proper eating for a new mother.	_____	_____	_____	_____
14. Sleep and rest needs for a new mother.	_____	_____	_____	_____
15. Emotional reaction to being a new parent.	_____	_____	_____	_____
16. Depressed feelings, "post-partum blues", or "baby blues".	_____	_____	_____	_____
17. What it's really like to be a parent.	_____	_____	_____	_____
18. Problems other mothers have.	_____	_____	_____	_____
19. How life with the baby's father is affected by the baby's birth.	_____	_____	_____	_____

How important is it for new mothers to have the following information about themselves?

Please indicate your feelings below.

	Very Important	Important	Somewhat Important	Not Important
20. How life with other people is affected by the baby's birth (parents, in-laws, friends).	_____	_____	_____	_____
21. How to get the baby's birth certificate.	_____	_____	_____	_____
22. How to be a good parent.	_____	_____	_____	_____
23. How to best manage time with a new baby.	_____	_____	_____	_____

How important is it for new mothers to have the following information about their baby?

Please indicate your feelings below.

	Very Important	Important	Somewhat Important	Not Important
1. How the newborn baby looks.	_____	_____	_____	_____
2. How to feed the baby.	_____	_____	_____	_____
3. Information about bottle/breast feeding.	_____	_____	_____	_____
4. Preparing bottles.	_____	_____	_____	_____
5. How often to feed the baby.	_____	_____	_____	_____
6. Burping the baby.	_____	_____	_____	_____
7. How to hold the baby.	_____	_____	_____	_____
8. Equipment needed for a young baby (crib, bottles, clothes).	_____	_____	_____	_____
9. Bathing the baby.	_____	_____	_____	_____
10. Care of the baby's cord, navel, and circumcision.	_____	_____	_____	_____
11. Sleeping habits of young babies.	_____	_____	_____	_____
12. Diaper care.	_____	_____	_____	_____
13. How to diaper a baby.	_____	_____	_____	_____
14. What to do when the baby cries.	_____	_____	_____	_____
15. Colic (baby's stomach aches).	_____	_____	_____	_____

How important is it for new mothers to have the following information about their baby?

Please indicate your feelings below.

	Very Important	Important	Somewhat Important	Not Important
16. Cradle cap.	_____	_____	_____	_____
17. Clipping the baby's nails.	_____	_____	_____	_____
18. Constipation and diarrhea.	_____	_____	_____	_____
19. Baby's laundry (diapers, sheets, clothes).	_____	_____	_____	_____
20. Diaper rashes.	_____	_____	_____	_____
21. How to take a baby's temperature.	_____	_____	_____	_____
22. When to start immunizations (baby shots).	_____	_____	_____	_____
23. How to know when a baby is sick.	_____	_____	_____	_____
24. Medical care for a baby.	_____	_____	_____	_____
25. How to take care of a sick baby.	_____	_____	_____	_____
26. Protecting the baby from accidents.	_____	_____	_____	_____
27. Ways to make a baby feel happy and loved.	_____	_____	_____	_____
28. Spoiling the baby.	_____	_____	_____	_____
29. What to expect that a baby can do in the first few weeks of life.	_____	_____	_____	_____
30. Community agencies and resources (public health clinics, food programs).	_____	_____	_____	_____
31. How to choose a baby-sitter.	_____	_____	_____	_____

Please fill in today's date. _____/_____/_____

What other information do you feel would be helpful?

_____

_____

_____

_____

Thank you very much!

Appendix B

Letter of Approval

from the Mississippi University for Women

Committee on Use of Human Subjects in Experimentation

MISSISSIPPI UNIVERSITY FOR WOMEN
Columbus, MS 39701

Vice President for Academic Affairs
P.O. Box W-1603
(601) 329-7142

March 21, 1991

Ms. Lisa Rowland
c/o Graduate Nursing Program
Campus

Dear Ms. Rowland:

I am pleased to inform you that the members of the Committee on Human Subjects in Experimentation have approved your proposed study on "Health Education Needs Perceived by First-Time Mothers and Their Health Care Providers."

I wish you much success in your research.

Sincerely,

Thomas C. Richardson
Vice President
for Academic Affairs

TR:wr

cc: Dr. Blow
Dr. Hill
Dr. Barrar
Dr. Rent

Appendix C

Clinical Agency Memorandum of Agreement

for Hospital

CLINICAL AGENCY MEMORANDUM OF AGREEMENT

TITLE OF STUDY: Postpartum Health Education Needs: Perceptions of First-Time Mothers and Health Care Providers

Name of Researcher: Lisa Rowland, BSN

Name of Agency:

_____

Name of Agency Representative:

_____

AGENCY INVOLVEMENT IN THE STUDY:

Permission to seek research participants for the study and collect data from first-time mothers and nurses who agree to participate. Permission for the researcher to review hospital records of first-time mother participants for the collection of demographic data.

COMMENTS CONCERNING AGREEMENT:

_____

_____

_____

_____ _____

Agency Representative's Signature **Date**

_____ _____

Researcher's Signature **Date**

Appendix D

Informed Consent

for First-Time Mothers

CONSENT FORM for Postpartum Health Education Needs

My name is Lisa Rowland and I am a graduate nursing student at Mississippi University for Women. I am interested in the postpartum health education needs of new mothers and am performing a study about these needs as part of my thesis work. The study will describe postpartum health education needs perceived by first-time mothers and health care providers.

Since you are a new mother I am requesting your help with this project. Your participation will provide information which can help health care providers have a better understanding of your concerns and needs.

If you decide to participate you will be asked to fill out a questionnaire while you are in the hospital and then to fill out another copy of the same questionnaire when your baby is between three and four weeks old. There are no right or wrong answers to the questionnaire. I am simply interested in finding out what you believe is important health information for new others to have. Your answers may be the same on the second questionnaire or they may be different.

All the information gathered in this study will be confidential. No names will appear on the questionnaires. Your relationship with your doctors, nurses, and the hospital will not be changed by your decision. If you decide to participate you will be giving me permission to review your hospital chart to get information about you and your baby. You are free to withdraw from the study at any time before the results are analyzed.

If you have any questions, please ask me. I will be happy to answer them. Thank you for your time.

CONSENT FORM for Postpartum Health Education Needs

Your signature below indicates that you have decided to participate in the study and gives permission for Lisa Rowland to review your hospital chart.

_____ _____

Signature of Participant Date

_____ _____

Signature of Researcher Date

Appendix E

Informed Consent for Health Care Providers

CONSENT FORM for Postpartum Health Education Needs

My name is Lisa Rowland and I am a graduate nursing student at Mississippi University for Women. I am interested in the postpartum health education needs of new mothers and am performing a study about these needs as part of my thesis work. The study will describe postpartum health education needs perceived by first-time mothers and health care providers.

Since you provide health care for new mothers I am requesting that you help by participating in the study. If you decide to participate you will be asked to fill out one questionnaire on which you will express your opinions about important health care topics for first-time mothers.

Participation in the study is strictly voluntary. If you decide to participate, you are free to change your mind at any time before data analysis. The information you provide can help us as health care providers have a better understanding of what is important for us to teach new mothers.

All the information gathered in this study will be confidential. No names will appear on the questionnaires and there will be no way for others to identify you with your answers.

If you have any questions, please ask me. I will be happy to answer them. Thank you for you time.

CONSENT FORM for Postpartum Health Education Needs

Your signature below indicates that you have decided to participate in the study.

_____ _____

Signature of Participant Date

_____ _____

Signature of Researcher Date

Appendix F

Clinical Agency Memorandum of Agreement for Primary Care Clinics

CLINICAL AGENCY MEMORANDUM OF AGREEMENT

TITLE OF STUDY: Postpartum Health Education Needs: Perceptions of First-Time Mothers and Health Care Providers

Name of Researcher: Lisa Rowland, BSN

Name of Agency:

_____

Name of Agency Representative:

_____

AGENCY INVOLVEMENT IN THE STUDY:

Permission to collect data from health care providers employed at the clinic who agree to participate in the study.

COMMENTS CONCERNING AGREEMENT:

_____

_____

_____

_____ _____

Agency Representative's Signature **Date**

_____ _____

Researcher's Signature **Date**